



PALAIS DE JUSTICE, BRUXELLES.

REVUE DE L'ARCHITECTURE EN BELGIQUE. Par CH. BOLS

[Hon. Corr. M.], Bourgmestre de Bruxelles.

IL est impossible de se rendre un compte précis des tendances de l'architecture contemporaine en Belgique si l'on n'a une teinture de l'histoire de la construction dans les contrées qui ont contribué à former le territoire actuellement occupé par la nation belge.

Depuis l'an 965, date de fondation de l'église romane de Saint-Vincent de Soignies, jusqu'à 1830, date de la séparation violente de la Belgique d'avec les Pays-Bas, l'art de la construction a subi en Belgique la même évolution que dans les autres parties de l'Europe occidentale. Mais les Flamands et les Wallons donnèrent nécessairement à leurs formes architecturales un caractère spécial, qui découle et de leurs tendances de race et de la nature des matériaux qu'ils trouvèrent sur place.

Les schistes employés par les Wallons pour leurs édifices romans leur imprimèrent un aspect robuste et grossier. Mais même dans la partie wallonne du pays on observe l'action de deux facteurs : au sud les monuments se ressentent de l'influence française, à l'est prévaut l'influence rhénane. L'influence française se marque par une prédominance d'éléments classiques, l'influence germanique par des emprunts à l'art byzantin. Ces tendances se

[TRANSLATION.]

It is impossible to form a clear conception of the tendencies of contemporary architecture in Belgium, unless one has some sort of acquaintance with the history of construction in the countries which have combined to form the territory at present occupied by the Belgian nation.

From the year 965, the date of the foundation of the Romanesque church of Saint-Vincent de Soignies, to 1830, the date of the violent separation of Belgium from the

Netherlands, the art of construction has undergone the same development in Belgium as in the other parts of Western Europe. But the Flemings and the Walloons necessarily gave to their architectural forms a special character which proceeds both from their racial tendencies and from the nature of the materials which they found at hand.

The schists employed by the Walloons for their Romanesque buildings impart to them a sturdy and rugged

révèlent encore dans la forme des clochers. Nous constatons la présence de ce double courant jusqu'à nos jours.

La Belgique cependant, plus soumise à l'influence française que l'Allemagne, laisse, avant celle-ci, l'ogive envahir peu à peu la construction romane. Mais le caractère monacal de cette dernière s'efface bientôt sous le souffle laïque; les villes en grandissant gagnent conscience de leur force; les communes se constituent. Le premier architecte laïque que nous connaissons, Arnold de Binche construit la jolie église de Pamele, en 1235. La construction romano-ogivale la plus vaste et la plus grandiose est le chœur de Saint-Martin à Ypres.

A partir du XIII^e siècle l'influence gothique devient si prédominante, qu'elle transforme complètement le style qui régnait depuis deux cents ans. L'église abbatiale de Villers (1197) marque la domination définitive de l'ogive, apparue en France vers 1160.

Nos architectes flamands bâtissent sur un plan français des sortes de halles qui rappellent les constructions de l'Allemagne du Nord.

Mais les Flamands plus rapprochés des carrières emploient de préférence la pierre. Le *Ziegelbau*, la construction en briques, si commune le long de la Baltique, ne se rencontre que dans le nord de la Belgique, à l'Eglise d'Hoogstraeten. Dans la Flandre occidentale un grand nombre de maisons, entièrement bâties en briques ont des cordons et des moulures taillées dans la même matière; la Halle de Nieuport (1480) et sa tour sont construites en briques blanches, semblables à celles que l'on confectionne encore dans la vallée de l'Yser.

La construction des églises en forme de halles, c'est-à-dire avec les trois nefs d'égale hauteur, donne plus de clarté et de légèreté à l'intérieur, mais par là elles se rapprochent des bourses, ont un caractère laïque et perdent l'aspect mystérieux des églises aux massifs piliers et aux nefs sombres. Les Flamands furent toujours gens positifs, le mysticisme eût peu de prise sur eux. Cependant les riches marchands flamands, dont la principale préoccupation était la conservation des franchises achetées ou arrachées à leurs seigneurs, attachèrent plus de prix aux monuments qui témoignaient de la grandeur et de la puissance de la commune qu'à ceux qui devaient attester leur foi; aussi les hôtels de villes brillent-ils encore aujourd'hui dans tout l'éclat de leur beauté, tandis que la plupart des églises sont restées inachevées.

Les églises du centre de la Belgique présentent un caractère de simplicité un peu sèche.

aspect. But even in the Walloon districts the action of two factors is perceptible: in the south the buildings are affected by French influence, in the east the Rhenish influence prevails. The French influence is marked by a predominance of classic elements, the Germanic influence by features borrowed from Byzantine art. These tendencies are further revealed in the shape of the spires. The existence of this double current can be still noticed at the present day.

Belgium, however, more susceptible than Germany to French influence, allows the Pointed style to encroach gradually upon the Romanesque construction some while before her neighbour. But the monastic character of the latter style soon dies beneath the breath of the lay builder; towns, as they increase, grow conscious of their strength; communes assume a corporate existence. The first lay architect with whom we are acquainted, Arnold de Binche, built the pretty church of Pamele in 1235. The vastest and most grandiose structure of the transition period is the choir of Saint-Martin at Ypres.

From the thirteenth century the Gothic influence becomes so predominant that it completely transforms the style that had been prevailing for two hundred years. The abbey church of Villers (1197) marks the definite triumph of the pointed arch which had appeared in France in 1160.

Our Flemish architects build, on a French plan, kinds of market-halls which recall the buildings of North Germany.

But the Flemings, who are near the quarries, prefer to employ stone. The *Ziegelbau*, or brick-construction, so common along the Baltic, is only met with in the north of Belgium, in the church of Hoogstraeten. In West Flanders a great number of houses built entirely of brick have string-courses and mouldings carved out of the same material. The market-hall of Nieuport (1480) and its tower are built with white bricks, like those which are still manufactured in the valley of the Yser.

The construction of churches in the form of market-halls, that is to say, with three naves of equal height, gives greater clearness and lightness to the interior, but for that very reason they suggest commercial Exchanges, have a distinctly lay character, and lose that quality of mystery possessed by churches with massive pillars and sombre naves. The Flemings are a positive race, and mysticism would have little hold upon them. However, the rich Flemish merchants, whose principal concern was to preserve the privileges bought or wrung from their lords, attached a higher value to the monuments which bore witness to the greatness and power of their commune than to those which were to show evidence of their faith; so, to this very day, town-halls shine in all the splendour of

Dans les provinces orientales on constate un développement plus riche, qui va quelquefois jusqu'à l'excès.

La Flandre fut initiée à l'art de la Renaissance, soit par une importation directe d'Italie, souvent visitée par les Flamands, soit par l'entremise de l'Espagne, où nos artistes allaient travailler pour nos souverains.

Cependant le style ogival se maintint longtemps dans nos contrées. On construisit encore la chapelle du refuge de Tronchiennes, à Gand en 1607; le beffroi du Furnes en 1634; l'église des Capucins à Gand, la même année, en s'inspirant des traditions ogivales.

Les façades des églises du XVII^e siècle présentent une superposition des ordres classiques; elles sont plaquées contre l'édifice et ne concordent pas avec la disposition intérieure; les coupes, si communes en France et en Italie, sont rares en Belgique.

L'aspect intérieur de ces églises ne pouvaient plus éveiller l'impression de lieux de méditation et de recueillement, comme les sombres basiliques romanes et les vastes églises gothiques; ce sont plutôt de grandes salles de palais somptueux.

Le style de transition du

their beauty, whilst the majority of the churches have remained unfinished.

The churches of the centre of Belgium present a character of somewhat arid simplicity. In the eastern provinces a richer development is noticeable which sometimes is carried to excess.

Flanders was initiated in the art of the Renaissance, either through direct importation from Italy, so often

visited by Flemings, or through the medium of Spain, where our artists went to work for our sovereigns.

However, the Pointed style long survived in our lands. In 1607 the chapel of refuge of Tronchiennes was built at Ghent; in 1634 the belfry of Furnes; in the same year, the Church of the Capuchins at Ghent—all under the inspiration of the traditions of the Pointed style.

The façades of the churches of the seventeenth century

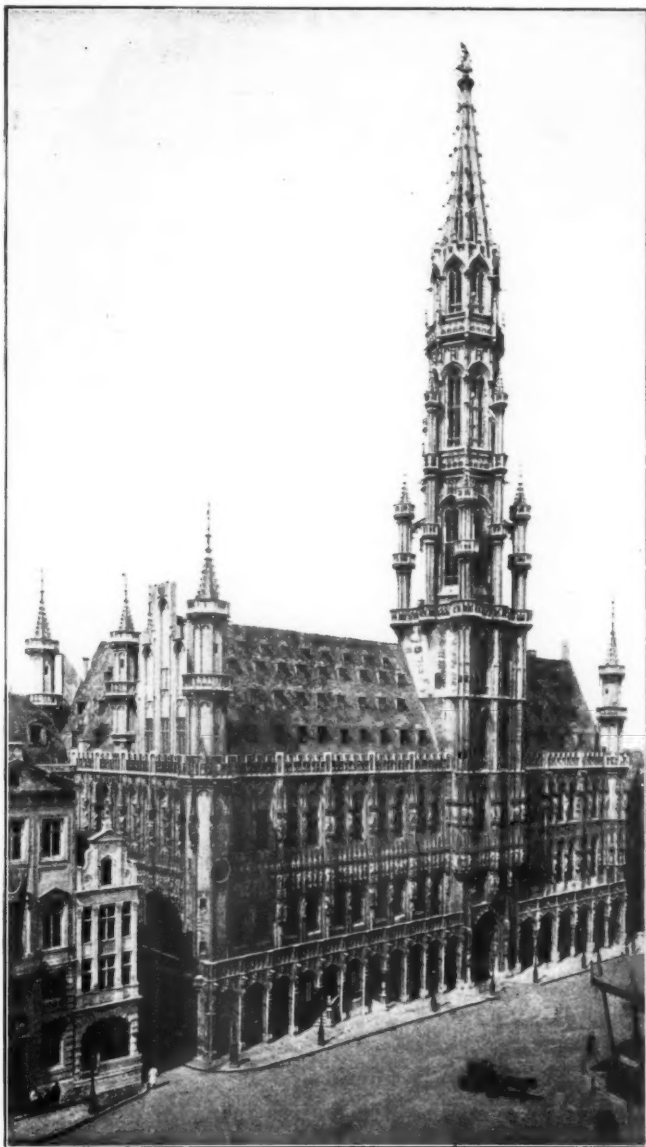


FIG. 1.—HÔTEL DE VILLE, BRUXELLES.

gothique à la Renaissance a été fort heureusement appliqué par nos architectes aux monuments civils, aux grands hôtels et aux habitations particulières. Ce compromis entre les



FIG. 2.—ÉGLISE SAINT-CHARLES, ANVERS.

formes classiques et les exigences du climat du Nord a même reçu le nom de style flamand. Il correspond à celui qui porte en Angleterre le nom d'Elisabeth.

Le XVI^e siècle, époque troublée en Belgique, où le catholicisme dut emprunter au bras séculier les moyens de réprimer la réforme, ne vit bâtir aucune église. Par contre, une fois victorieuse, l'Eglise célébra son triomphe par une recrudescence de constructions, au XVII^e siècle.

Aux influences déjà indiquées, il faut ajouter celle de notre puissant peintre Rubens, qui, séduit par l'architecture des palais de Gènes, publia leurs plans et donna naissance chez nous à une architecture pittoresque, exubérante qui trouve son expression la plus complète dans les maisons de la Grand' Place de Bruxelles [fig. 3], reconstruites après le bombardement de 1695.

Le XVIII^e siècle, durant lequel on éleva, en une fois, le

quartier du Parc à Bruxelles, dû à l'architecte Guimard, marque une soumission absolue à l'influence française et aux styles des règnes de Louis XIV. et de Louis XVI.

present a superposition of the classic orders: they are put against the edifice, and do not harmonise with the interior arrangements. Cupolas, so common in France and Italy, are rare in Belgium.

The interiors of these churches had no longer the power of awakening the impression of places of meditation and abstraction from the world, like the gloom-filled Romanesque basilicas and the vast Gothic churches; they are rather state halls of sumptuous palaces.

The style of the transition from Gothic to Renaissance has been most successfully applied by our architects to civil buildings, large mansions, and private residences. This compromise between the classic forms and the exigencies of the northern climate has even received the name of the Flemish style. It corresponds with the English style that bears the name of "Elizabethan."

The sixteenth century, a troublous period in Belgium, in which Catholicism had to borrow from the secular arm

the means of checking reform, saw no church built. On the other hand, however, once victorious, the Church celebrated its triumph by a revival of architecture in the seventeenth century.

To the influences already indicated we must add that of our mighty painter Rubens, who, enchanted by the architecture of the Genoese palaces, published their plans, and gave birth in our country to a picturesque, exuberant architecture which finds its completest expression in the houses on the Grand' Place of Brussels [fig. 3], rebuilt after the bombardment of 1695.

The eighteenth century, during which was built, in one operation as it were, the Quartier du Parc at Brussels, under the direction of the architect Guimard, marks an absolute submission to French influence and to the styles of the reigns of Louis XIV. and Louis XVI.

Conquered, overwhelmed with war expenses, despoiled of her art-treasures, the duelling-ground of the nations of

Vaincue, accablée de contributions de guerre, dépouillée de ses œuvres d'art, champ clos des nations d'Europe, la Belgique ne bâtit rien pendant la sombre période de la domination



FIG. 3.—GRAND PLACE, BRUXELLES.

française. Pendant la réunion de la Belgique aux Pays-Bas (1815-1830) c'est le style sec et froid de l'empire qui domine. Le portique du Palais du Roi (1827), le Palais d'Arenberg,

Europe, Belgium built nothing during the gloomy period of the French ascendancy. During the union of Belgium with the Netherlands, the cold, barren style of the Empire prevails. The portico of the Palais du Roi (1827), the Palais d'Arenberg, the Château de Mariemont are specimens. L. T. Roelandt shared public favour at this time with T. F. Suys. The University (1819), the Palais de Justice (1818), and the Casino (1835) of Ghent reveal the dulness of his conceptions.

The most brilliant pupil of T. F. Suys was Cluysenaar, who carried on the traditions of the master with some sacrifices to modern taste. The Hôtel Goethals, the Galeries Saint-Hubert, the Marché de la Madeleine at Brussels display neither salient faults nor marked originality. The Conservatoire de Musique points to a lamentable poverty of invention.

Meanwhile artists as well as the public were beginning to weary of the monotonous repetition of classic forms, so

ill-suited to the northern climate, the luxurious needs of a prosperous nation, and the exigences of modern life.

The construction of three houses in the calcareous stone of Soignies, by J. J. Dumont, made a sensation. The young artist, however, had limited himself to hiding under a somewhat commonplace Renaissance decoration the poverty of the classic construction. But the charm was broken; in Belgium, as everywhere else in Europe, national feeling awakened, the people cultivated the Flemish tongue, began to sing the old popular airs, sought to free themselves from the Italian taste and the French style—in a word, to be of their own country.

Balat, the younger Suys, Beyaert, Poelaert, and Janssens were the architects most before the public eye from 1850-1880. Of these five, M. Wynand Janssens is the only one who continues to practise his art. He has been able to adapt successfully the Louis XVI. style to the more luxurious needs of modern society. He was the collaborator of

le Château de Mariemont en sont des spécimens. L. T. Roelandt partageait à ce moment la faveur publique avec T. F. Suys. L'Université (1818), le Palais de Justice (1818), le Casino (1835) de Gand révèlent la lourdeur de ses conceptions.

Le plus brillant élève de T. F. Suys fut Cluysenaar, qui continua les traditions du maître, mais en sacrifiant un peu au goût moderne. L'Hôtel Goethals, les Galeries Saint-



FIG. 4.—PALAIS DES BEAUX-ARTS, BRUXELLES.

Hubert, le Marché de la Madeleine à Bruxelles, ne montrent ni défauts saillants ni originalité marquée; le Conservatoire de Musique accuse une déplorable pauvreté d'invention.

Cependant les artistes aussi bien que le public, commençaient à se lasser de la monotone répétition des formes classiques, si mal appropriées au climat du nord, aux besoins de luxe d'une nation prospère et aux exigences de la vie moderne.

Beyaert for the façade and the interior decoration of the Banque Nationale: he completed the Church of Saint-Catherine, begun by Poelaert, which, like the Church of Saint-Eustache at Paris, is built on a Gothic plan in the style of the Renaissance (1850).

Curiously enough, M. Balat, who had won recognition by the Château de Mirwar, built in the style of the Flemish Renaissance, and had thereby evoked among the younger school of artists an accentuated return to this national style, remained the most faithful to the Italian traditions of the Renaissance. Greatly in favour at the Court, he was mainly responsible for keeping the architecture of official buildings on these lines, so little in harmony with national sentiment, and so little adapted to the utility of the buildings, whose symmetrical façades often cramp interior arrangements, as at the Hôtel d'Assche. The younger Suys, inheriting the traditions of his father,

has parisianised the classic orders; his work is *pretty*. The two most robust temperaments were certainly Poelaert and Beyaert. The former had the more daring genius, but the latter was the better draughtsman. Poelaert had the instincts of a painter-decorator: he conceived colossal edifices like Piranesi, and had Rubens's exuberant fancy for form, wherein he was a true Fleming. The engineers and sculptors with whom he was associated had an anxious task to put into practicable form the architraves of exaggerated proportions and the ultra-projecting mouldings which he dashed off feverishly on paper. One cannot imagine a more striking contrast to him than Beyaert, whose plans were the most minutely careful drawings, with every detail clearly and definitely indicated.

Poelaert's Palais de Justice at Brussels [p. 445] will mark an epoch in the history of our architecture. Upon a massive stylobate with accentuated bossages rise huge Roman-Doric

La construction de trois maisons, en pierre calcaire de Soignies, par J. J. Dumont fit sensation. Cependant le jeune artiste s'était borné à dissimuler sous une décoration, en style Renaissance assez banal, la pauvreté de la construction classique. Mais le charme était rompu ; en Belgique, comme partout en Europe, le sentiment de la nationalité se réveilla, on cultiva la langue flamande, on se remit à chanter de vieux airs populaires, on voulut s'affranchir du goût italien et du style français, être de son pays, en un mot.

Balat, Suys fils, Beyaert, Poelaert et Janssens furent les architectes les plus en vue de 1850 à 1880. De ces cinq artistes, M. Wynand Janssens est le seul qui continue à exercer son art. Il a su adapter heureusement le style Louis XVI. aux besoins d'élégance des gens du monde ; il fut le collaborateur de Beyaert pour la façade et la décoration intérieure de la Banque Nationale ; il acheva l'Eglise Sainte-Catherine, commencée par Poelaert, qui comme l'Eglise Saint-Eustache de Paris, est construite, sur un plan gothique, en style de la Renaissance (1850).

Chose curieuse, M. Balat qui s'était fait connaître par la construction du château de Mirwar, en style de la Renaissance flamande et qui par là avait provoqué parmi les jeunes artistes un retour accentué vers ce style national, est resté le plus fidèle aux traditions italiennes de la Renaissance. Très en faveur à la Cour, il a puissamment contribué à maintenir les constructions officielles dans cette direction peu nationale, peu appropriée à l'usage des édifices et dont les façades symétriques gênent souvent les dispositions intérieures, comme à l'Hôtel d'Assche. Suys fils, héritier des traditions paternelles, a parisianisé les ordres classiques, il a fait du *joli*. Les deux tempéraments les plus vigoureux furent certainement Poelaert et Beyaert. Le premier avait plus de fougue que le second, mais celui-ci était meilleur dessinateur. Poelaert avait les tendances d'un peintre décorateur, il concevait des constructions cyclopéennes, comme Piranesi, et avait l'exubérance de formes, propre à Rubens ; par là il était bien flamand. Les ingénieurs et les sculpteurs, qu'on devait lui adjoindre, avaient fort à faire pour rendre exécutables les architraves d'une portée exagérée et les moulures ultra saillantes dont il jetait fiévreusement l'es-



FIG. 5.—MAISON DU MATOU, BRUXELLES.

quissé sur le papier. On ne peut pas lui opposer un contraste plus frappant que Beyaert dont les plans étaient des épures soignées; chaque détail en était nettement et définitivement arrêté.

Le Palais de Justice de Bruxelles [p. 445] de Poelaert fera époque dans l'histoire de notre architecture. Sur un massif stylobate, à bossages accentués, se dressent de puissantes colonnes en pierre bleue, d'ordre dorico-romain, cannelées aux deux tiers; leurs chapiteaux, en pierre blanche d'Euville, supportent une architrave qui, du côté de la façade principale, est

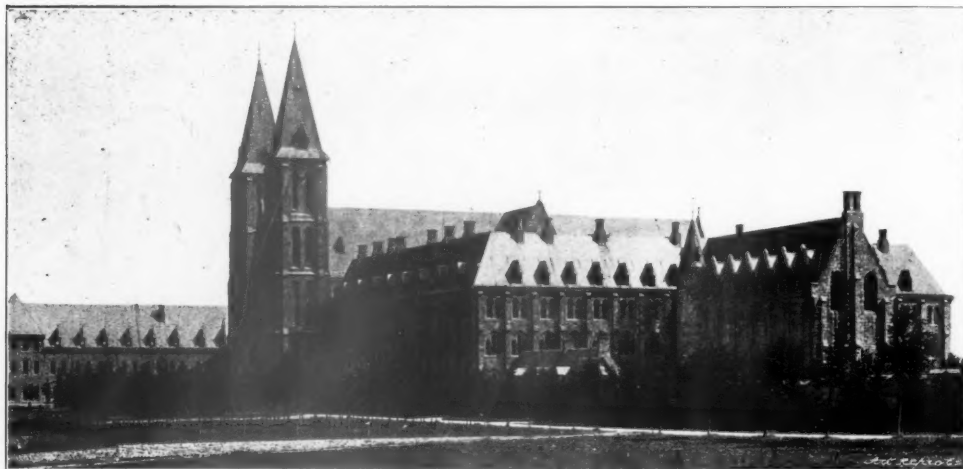


FIG. 6.—ABBAYE DE MAREDSOUS.

surmontée d'un attique. Cette façade est d'un caractère majestueux. Le noyau de l'édifice est, en somme, grec revêtu d'ornements romains, traités en style flamand. On y retrouve, en effet, quelques-uns de nos défauts: des entassements de colonnes, des profils exagérés, la lourdeur prise pour de la grandeur, l'amour du faste. Les saillies de certains membres d'architecture, aux pavillons de la façade principale, sont telles qu'il en résulte une confusion analogue à celle que présentent certaines de nos constructions du XVII^e siècle. Il est douteux qu'il faille attribuer à Poelaert la paternité du malheureux dôme juché comme sur des échasses formées de deux ordres de colonnes. Nous avons vu les dessins primitifs de l'édifice;

columns in blue stone, fluted two-thirds of their height. Their capitals of white Euville stone support an architrave which, on the side of the main façade, is surmounted by an attic. This façade is of majestic character. The frame of the edifice is, on the whole, Greek, covered with Roman ornamentation treated in the Flemish style. In fact some of our faults are to be met with: the over-clustering of shafts, exaggerated outlines, heaviness mistaken for grandeur, the love of lavish ornament. The projection of certain architectural features in the pavilions of the chief façade is such that it results in a confusedness analogous to that presented by some of our buildings of the seventeenth century. It is doubtful whether one ought to attribute to Poelaert the paternity of the unfortunate dome perched as it were upon stilts formed of two orders of columns. We have seen the original designs for the building: it was then crowned by a superposition of horizontal flat-roofs, which better harmonised with the Babylonish character of the building

than the lantern with which it has been surmounted after the death of the artist, and, if we are rightly informed, on the advice of M. Garnier, the architect of the Opéra at Paris, who was wrongly consulted, seeing that Belgium was not devoid of talented architects, who would have been more inspired than a Frenchman by our national traditions.

Beyaert, seeing the ill-success of Dumont's attempt, sought at first, in the fine mansions built by Guimard, the elements of a reaction against the style of the Empire, and applied the Louis XVI. style to the Hôtel de la Banque Nationale, giving it nevertheless a Flemish stamp, less heavy and pompous than the Louis XIV. style, less graceful and less cold than the style of Louis XVI. But soon he frankly set forth on the quest of a national style, taking up the traditions of the Flemish Renaissance, a transition from the style of the fifteenth century to that of the sixteenth.

A constructor of the first rank, Beyaert corrected the faults of this too exclusively picturesque Flemish art by

il se couronnait alors d'une superposition de terrasses horizontales qui répondaient mieux au caractère babylonien de l'édifice que la lanterne dont on l'a surmonté après la mort de l'artiste, et si nous sommes bien informés, sur les conseils de M. Garnier, architecte de l'Opéra de Paris, qu'on a eu le tort de consulter, alors que la Belgique ne manquait pas d'architectes de talent, qui se seraient mieux inspirés qu'un Français de nos traditions nationales.

Beyaert, voyant l'insuccès de la tentative de Dumont, chercha d'abord dans les beaux hôtels, bâtis par Guimard, les éléments d'une réaction contre le style de l'empire et appliqua le style Louis XVI. à l'Hôtel de la Banque Nationale, en lui donnant cependant un cachet flamand, moins lourd et moins pompeux que le style Louis XIV., moins gracieux et moins sec que le style Louis XVI. Mais bientôt il se mit franchement à la recherche d'un style national, en reprenant les traditions de la Renaissance flamande, transition entre le style du XV^e siècle et celui du XVI^e siècle.

Constructeur de première force, Beyaert corrigea les défauts de cet art flamand, trop exclusivement pittoresque, en définissant nettement les lignes de ses édifices, soit qu'il les empruntât aux ordres classiques (Hôtel du Ministère des Chemins de Fer); soit qu'il s'inspirât de l'ossature gothique (grille du square du Petit Sablon), Beyaert rencontra justement la faveur publique et notre pays conservera précieusement ses belles constructions (châteaux de Faulx et de Wespelaer, Porte de Hal, Banque Nationale à Anvers, Maison du Matou [fig. 5] et Maison Hanrez à Bruxelles, Gare de Tournai).

Nous terminons cette rapide revue avec cet architecte de talent mort en 1894, afin de réserver notre prochaine étude aux œuvres d'architectes vivants.

Cependant, avant de clôturer celle-ci, citons encore le mouvement néo-chrétien qu'il serait injuste de passer sous silence. Des catholiques ardents, groupés à Gand autour du baron Béthune ont fondé l'école de Saint-Luc, où les élèves puisent tout leur enseignement et toutes leurs inspirations dans les modèles gothiques du XIII^e siècle. Cet exclusivisme a produit des résultats très remarquables au point de vue de la pureté du style; le Béguinage de Gand, l'Abbaye de Maredsous [fig. 6] peuvent en témoigner; mais en dehors des édifices consacrés au culte ou à la vie claustrale, le style du XIII^e siècle convient peu aux besoins de luxe et de confort de nos contemporains. Aussi pourrions-nous constater que nos architectes actuels ont tenté des innovations un peu dans toutes les directions, montrant ainsi qu'ils ne pouvaient échapper au cosmopolitisme qui est le caractère dominant de l'art du dernier quart du XIX^e siècle.

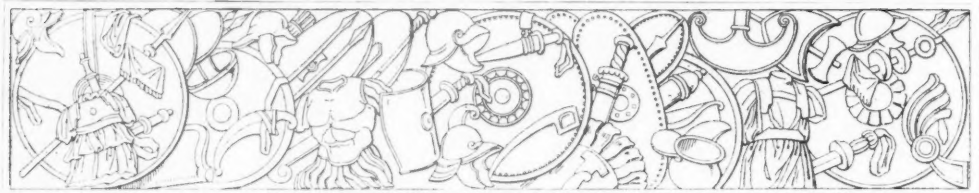
clearly defining the lines of his buildings, either borrowing them from the classic orders (as in the Hôtel du Ministère des Chemins de Fer), or by deriving inspiration from the Gothic framework (as in the screen in the square du Petit Sablon). Beyaert justly met with popular favour, and our country will jealously preserve his beautiful buildings (the Châteaux de Faulx and de Wespelaer, the Porte de Hal, the Banque Nationale at Antwerp, the Maison du Matou [fig. 5] and the Maison Hanrez at Brussels, the Railway Station of Tournai).

We conclude this swift review with this talented architect, deceased in 1894, in order to reserve our next study for the works of living architects.

Before closing this, however, mention should be made of the Neo-Christian movement, which it would be unjust to pass over in silence. Some ardent Catholics, rallying at

Ghent around Baron Béthune, have founded the school of Saint-Luc, where the pupils draw all their teaching and their inspiration from the Greek models of the thirteenth century. This exclusiveness has produced very remarkable results, from the point of view of purity of style; witness the Béguinage of Ghent and the Abbaye de Maredsous [fig. 6]. But except in the case of buildings devoted to religion or conventual life, the style of the thirteenth century is but little adapted to the requirements of our contemporaries in the way of luxury and comfort. So we can conclude that our architects of the present day have tried innovations somewhat in all directions, thus showing that they could not escape from the cosmopolitanism which is the dominant characteristic of the art of the last quarter of the nineteenth century.





THE LEGAL LIABILITIES OF ARCHITECTS. By Professor KERR [F].

The Law relating to Civil Engineers, Architects, and Contractors; with a Chapter on Arbitrations. By L. Livingston Macnisey, Barrister-at-Law, M.Inst.C.E., and J. Andrew Strahan, M.A., LL.B., Barrister-at-Law, Hon. Assoc. R.I.B.A. Second Edition. 8s. Lond. 1897. Price 12s. 6d. [Messrs. Stevens & Sons, 119-20, Chancery Lane.]

[SECOND NOTICE.]

IN the previous notice of this treatise [*ante*, p. 369] it was thought advisable on professional grounds to confine attention to the Practice of Arbitrations, meaning by that expression the business of adjudication in building disputes through the instrumentality of a building expert, especially an architect; and it was remarked that, as a matter of course, the adjudicator ought to know—or, if the reader prefers it, every architect ought to know—"a little law." We may now be allowed to inquire, with the help of the well-arranged and considerate volume before us, what direction any one of us ought modestly to take, as an expert only in building, in order to possess himself of a sufficient acquaintance with accepted principles of legal justice in building affairs. Fortunately for such an inquiry there is a well-known maxim to the effect that English law is but the essence of English common sense; and, if this be so, it follows easily enough that an intelligent architect has no very difficult task here assigned to him.

When a dispute is one which affects the professional duty of an architect towards his employer, we perceive without surprise that primary questions of conduct may be taken to turn, first, upon his possession of architectural skill—at any rate of the practical order; and secondly, upon his faithful exercise of that skill for his client's benefit, including of course the display, not merely of intelligence, but of integrity. In commercial language skill is the article he sells; its proper exercise is the delivery of the article; and the obligation of uprightness, besides being an axiomatic consideration always, is one which assumes a special importance with relation to the particulars of duty involved in the administration of building operations by a fiduciary agent. With regard to this last point, it may be worth while to observe that the well-known formula *caveat emptor*—which really suggests to a seller that he is entitled by law to cheat a buyer if he can—does not apply in any way whatever to an architect's dealings with his employer, or, for that matter, with his builder either; for if there be any kind of business in which, even in these days, honesty is not the best policy, it certainly is not the business of the architect.

One of the curious distinctions which attach to the professional position of an architect is thus laid down in the treatise before us:—

In all matters of his employment "which do not involve any relations with third persons"—that is to say generally, while as yet he has not arrived at the actual supervision of the builder's work—he is "in the position of a skilled servant"; but when "works are being carried out" under his charge, or when "negotiations are being conducted on behalf of the client," he has ceased to be only the "servant" of an employer, and has become the "agent" of a principal. For example, he at first prepares his design as a work-and-labour servant, but he sees to its execution afterwards as a fiduciary agent. Where exactly to draw the

line between the two capacities in respect of responsibility may probably be deemed a difficulty by practical men, but, if so, we may regard it as only one more illustration of the radical difference in building business between the abstractions of logic and the actualities of work. However, when the "agency" of an architect comes more prominently into view as touching the principal's pocket—say when the client has unexpectedly to deal with a heavy bill of extras, or to defend a neighbour's claim for damages or injunction—difficulties of a most serious kind, both technical and practical, may be found to arise; and one thing that some practitioners may require to be told is that "it seems perfectly certain that without the express consent of the employer the architect has no authority whatever materially to alter the contract and work as laid down in the drawings and specification," such a warning turning of course very much upon the cautious introduction of the word "materially," but still leaving the architect at the mercy of forensic rhetoric and its formulæ. The case which seems to establish this principle (dated 1841) even goes so far as to deprive the builder of his right to recover payment from the employer for extra work admittedly executed, and presumably gives him a right to recover from the architect if he has ordered the deviation without the legally recognisable authority. Later cases carry the application of the principle, no less inconveniently, into the question of taking out quantities. Only a very few years ago a quantity surveyor sued a well-known practical architect and his employer jointly—having received instructions from both—for payment of his charges for preparing bills of quantities. The lowest tender had amounted to more than £10,000, whereupon the design (which means in law the working plans and specification) had been cut down in the usual way, and the building as thus reduced duly executed. In these circumstances a certain considerable sum had been paid to the quantity surveyor, but he demanded more. The employer was allowed to allege (surely absurdly enough) "that he instructed the plaintiff that he was not prepared to spend more than £5,000"; and this, therefore, had to be gravely denied; but what concerns our present inquiry more is the equally amusing decision which was arrived at by a special jury. In finding for the surveyor for an amount somewhat less than his claim, they awarded that about two-thirds of it should be paid by the employer and one-third by the architect. This verdict was presumably based upon the conclusion that the architect as an agent had somehow exceeded his legal authority; but it is still difficult to understand. Another case is quoted, however, in which the surveyor sued the architect alone, who, failing to show his client to be liable, had to pay for the quantities himself, although they were actually used for obtaining tenders. It is pretty well known that an architect has always to be exceedingly careful in ordering materials or other goods for the building or the builder; but it is also plain that he ought not to allow himself in any other respect to indulge indiscreetly in that spirit of friendly agency which may lead to his overstepping the strictly legal limits of "express authority"; indeed, in this respect, as in so many others, he should remember that it is easy, as it is certainly judicious, to keep the client fully informed by letter of all that is being done.

How far an architect may find himself liable for the substantiality of his "design" structurally is a question that ought not to be overlooked in these days of so much jerry-building, close tendering, sub-contracting, limited liability, and other indulgences of the speculative instinct. In 1891 the widow of a workman, who had been killed through the fall of some flimsy houses while in course of erection, sued the owner, the builder, and the architect all together for damages. "It was shown that the fall of the building was due to a wall being too slight to bear the strain upon it." The jury, at the suggestion of the Judge, stopped the case as against the owner, but gave a verdict for £500 against the builder and the architect jointly. It ought to be borne in mind that, when real culpability can be proved, a jury has little mercy upon a pretender to skill, who is incompetent, or careless, or even over-

adventurous; and when human life is placed in jeopardy in such a complex and wholly expert undertaking as building, whether in respect of structural stability or sanitary safety, there are no limits to the risk of "liability for tort" that may unexpectedly arise.

But whether it be such responsibilities as these towards persons outside, or the equally mysterious dangers of misadventure with the employer, there can be no doubt that the possibilities of ruinous pecuniary claims and no less ruinous costs of litigation ought to be more seriously considered by architects than they generally are. For example, let the reader try to imagine what might be, under favourable conditions for the development of some microbe of mischief, the effect of such a maxim as this:—"It may be well to mention" (as if by way of an incidental pleasantry) "that where a contractor is in doubt as to whether the architect or the employer is liable, or whether they are jointly liable, he is entitled under the Supreme Court Rules, Order XVI., to join them" (not at all as a joke) "as defendants in the action." Suppose a case. A fine young architect, having pretty well exhausted his vitality in winning at last by competition a title to get a poor shilling in the pound (not without laboriously earning it), finds his committee severe and his contractor stalwart, and a quarrel consequently on foot which he is doing his utmost to reconcile, and all in vain. Why should he come to be unexpectedly served with a writ, for perhaps ten times his profits, and on some unintelligible technical issue of abstract law, with only this incomprehensible apology to console him—that the contractor being in legal doubt about one person is thereby "entitled" to proceed at haphazard against another? Nay more, if, being of a fine æsthetic spirit, he proceeds in a paroxysm of virtue to put the unsavoury process-server gently forth from his office, why should the lawyers be so mightily indignant about the insulted majesty of the law?

Be all this, however, as it may, let us look next at the question, more familiar by name, but still too little understood in essence, of architectural "negligence." Perhaps it may be said broadly that, although it has been suggested on the Bench itself that the client is very unwise who falls out with his architect, there are nevertheless not a few architects who have been a good deal surprised to learn, when such a misadventure has happened to occur in their own experience, how all-embracing the net of legal negligence may become, and how difficult it is for an architect to escape from its meshes when it is cleverly handled, especially before a jury. He is, as our authors blandly tell us, "the employer's servant, and in discharging his duties he must display a reasonable degree of skill and care," and "if he fail to display" (to make clearly manifest) "that reasonable skill and care, and damage in consequence is suffered by his employer, he will be responsible for that damage"—no matter what it may be assessed at. So that his five per cent. actually covers at any rate what may possibly take the form of a very comprehensive insurance or indemnity. By way of an effort to define in some degree what is actually meant by the term "negligence" in law, we are further told that "whenever the architect fails in the proper discharge of his duty" (of course, in the opinion of a jury), "he will be liable to his employer, unless he can show" (even by something more than proving a negative) "that the failure has been due to causes outside or beyond his control; he will be liable for ignorance or want of skill," and so on; and judgments are quoted to the effect that it is not enough to show that he had "acted *bonâ fide* and to the best of his skill and judgment," for he is "bound to conduct himself in a skilful manner," which is a very different thing; so that even *caveat emptor* does not seem to come in when the buyer is buying an architect's skill. However, we are glad to be informed, and without any appearance of irony, that although "want of skill, or negligence, may be shown in a number of ways," "fortunately for the honour and credit of the professions under discussion" (architects and engineers), "there are comparatively few cases in which negligence has been established against their members"—one good reason that we may suggest for this consolatory fact

being that it is not easy (although not quite impossible) to get professional brethren, even for a liberal fee, to give *ex parte* evidence in public in support of a shabby case.

The vexed question of an architect's liability, or even moral responsibility, for excess of cost over estimate, is more generously dealt with in this volume than perhaps in strict law it might have been. To specialists of experience, whether architects, surveyors, or builders, it certainly seems that even Judges on the Bench are sometimes too readily disposed to misunderstand what is the practical issue. The rough legal doctrine that an official estimate must be, if anything at all, a sort of contract of warranty, is seen by all experts to be quite mistaken. A statement of price as a contractor's tender is a plain commercial offer, even when speculative; but a statement of valuation by an architect, as an estimate of the cost of executing his design, is only a crude opinion—for what it may be worth in the particular circumstances; and it is really worth very little, or nothing, unless it has been formally and conclusively arrived at by the elaborated calculations of the quantity-surveyor. To put the case very plainly, what we all know is that such a surveyor requires to be paid for his laborious work by a not inconsiderable percentage, and that, as an employer will more than hesitate to incur that expense, he therefore has to content himself with mere approximate guess-work, which the architect, in fact, has to supply gratuitously. It is no reflection upon the good sense of either architect or employer if it be said that up to this point both are disposed, dealing with mere sketches of design, to take an economical view of everything; and that when those sketches are being fully developed into working plans and specification, both are inclined to accept more liberal views; so that, by the time the quantity-surveyor has actually brought matters into complete form, the estimate is naturally enlarged. Not only so, but the same process of automatic improvement is repeated as the building is being executed. Our authors have succeeded in grasping this point, and they frankly observe that as a matter of fact "the client is more frequently to blame for this than his professional adviser." But the height of the absurdity of the situation is that which is reached when a client pleads having "instructed" his architect at the beginning to limit the outlay to a specified sum, so that this instruction ought to be regarded at the end as the basis of a contract between them. Some persons have seemed inclined to argue that such an allegation is even sufficient to relieve them from the obligation to pay the builder's bill; but this is obviously more than the most enterprising counsel would venture to ask a jury to accept. Still, the unwelcome fact remains that, if the doctrine of an architect's commercial responsibility for estimate *versus* cost is allowed to have any weight at all (except, of course, in cases of fraud), it is difficult to see where its effect may end. There is one respect, however, in which an architect may legitimately enough fall into a snare, namely, when he supplies the quantities for his own works and permits himself or his assistant to act "negligently" in the more colloquial sense of the term. There is also another danger that may be mentioned. When in the builder's contract the usual provision is introduced that the architect is to "value" all extras and omissions, although in his capacity of "valuer" he may escape from interference in one direction on the part of the contractor, he may still as "architect" be called to account in the other direction by his client. This, however, may be said to be only one of the many anomalies which arise out of the more subtle than sound distinction which the law makes between a "valuation" and "an arbitration," no surveyor being able to explain the difference, except that the one is adjudication arbitrary and the other adjudication irresponsible, which is which being immaterial.

"When the architect is guilty of fraudulent collusion with the builder, his acts do not bind his employer. Fraud, as it is said, vitiates everything." The old-fashioned custom of the contractor allowing to the architect a supplementary private commission on the work, ostensibly either for some special trouble taken, or for certifying the instalments of pay-

ment, or for the special supply of copies of drawings, or possibly on some other such pretext, it is to be hoped has now completely died out; but, at any rate, it has to be distinctly understood that the element of privacy constitutes all such underhand transactions fraud. In like manner in the case of any person acting as supervising architect—and therefore as fiduciary agent—the acceptance of a commission or allowance on goods supplied for his building, even when, in personally ordering the goods, he makes himself legally liable for payment, is a fraud, except on the one condition that the client is a party to the transaction, or at least is duly informed of it and sanctions it, as he frequently may be quite willing to do. Here, again, it is the underhand element that creates the difference between the lawful and the unlawful. Moreover, it ought to be borne in mind that money received by the agent underhand is in law received by him on behalf of his principal; but in any case the obvious risk of an architect being held to have taken a bribe, however indirectly, or even in a certain sense innocently, is always a serious consideration, if only in view of the grave possibilities of a complicated commercial derangement arising, or, what is worse, an inextricable entanglement of character, “fraud” being such a very ugly word.

Having regard to many considerations more or less conspicuous, it is advised that “a written contract should always be insisted on by engineers and architects” (the treatise, by the way, is written for the two professions taken together, and, far from any confusion being thus created, it may be acknowledged that the combination of interests operates advantageously for both). But, as regards this particular question of a written contract, it will in practice be plain that, although the magnitude of engineering transactions, which are usually entered into also with great corporations, furnishes a reason for the most scrupulous formality, the very different conditions of the generality of architectural employment for private clients, and especially considering the more familiar confidential relations of the parties, are quite sufficient to account for the circumstance that, except when dealing with public bodies who have by law to contract under seal, an architect never stands upon such punctilio; indeed, it is not too much to say that clients, as a rule, would certainly take offence if “a written contract were insisted upon” or even suggested. However, it is very properly pointed out that, by the ancient, but still operative, law known as the Statute of Frauds, “no action shall be brought upon any agreement which is not to be performed in the space of one year from the making thereof, unless the agreement or some memorandum or note thereof shall be in writing, and signed by the party to be charged therewith.” No discussion of this matter of pure law is necessary here; but it may suffice to say that the usual incidental correspondence between architect and client is generally to all intents and purposes quite enough to rely upon; so that ordinary cases require only ordinary engagements.

The remuneration of an architect is, of course, a subject of controversy in many instances, and in many forms, and it is well understood that there is no legalised scale of allowances by which his charges can be officially taxed. In the absence, therefore, of a specific agreement for the occasion, the law will give him “reasonable remuneration,” and so leave the question to what is called the “custom” of the profession. The Schedule of Charges which has been published by the Royal Institute of British Architects for nearly forty years past is of the utmost service here, although it has no absolute authority in law. The present writer is probably the sole survivor of the committee which, under the chairmanship of the experienced and astute Sir William Tite, drew up the original document; and he does not forget the pains that were taken by the chairman to indicate plainly that it was not a series of rules, but a statement of ascertained custom. But a good many years afterwards, when another committee had to revise the details, it unfortunately happened that this distinction was somehow overlooked, and the designation “Rules” came inadvertently to be used. The result was for a time unfortunate; but matters have been put right since, and it is enough to

say now that the Schedule has long been fully recognised as properly representing the "custom" at common law. It has to be remembered, however, that its object is simply to allow the typical architect "reasonable remuneration" for typical services, and that questions of increase or diminution to suit exceptional cases are still left open for discussion, subject to the application of the Schedule as an accepted basis, and the ultimate appeal being, of course, to the opinion of a Court of Law, on evidence to be given by professional witnesses, or otherwise to the decision of an arbitrator on his own judgment as an expert.

The unpleasant possibility of an architect being summarily dismissed is not overlooked in our treatise, and it is laid down as recently established case-law that "a conviction of any act of dishonesty on his part, though not directly affecting his employer, will constitute a sufficient ground for his instant dismissal." Presumably this implies no more than an assertion of the principle that any man who is proved to be unfit for fiduciary agency ought to cease to be a fiduciary agent, so delicate a subject is good faith. But obviously such an idea may be carried too far. Again, as regards remuneration for past service in cases of dismissal, there seem to be some complex questions of law which need not be considered here. The same may be said of the case of the decease of an architect, when it is at least sufficiently clear that "the contract of employment is put an end to by his death, or his incapacity, mental or physical, to carry out the contract within a reasonable time"; whereupon "his rights and obligations under the contract do not pass to his representatives"—so emphatically so, indeed, that when the agreement is to perform the service for a lump sum, and the architect dies before its full completion, his representatives cannot recover any part of his charges; although on the other hand, if payment was to be made to him by instalments, they can recover any instalment actually due at the time of his death.

On the question what is the "reasonable skill" which an architect is held to have contracted to provide and use for his client's benefit, we are told that the answer can only be given "on a consideration of the circumstances of each case as it arises"; and it is apparently suggested that the standard of individual competency depends upon what the particular practitioner has "held himself out" to be qualified to do. But, as we are here referred to decisions dated 1767 and 1807, it may perhaps be doubtful how far this view of the matter can be reconciled with the more modern doctrine that the mere "acceptance" of a "retainer" implies a warranty; in other words, that "a person who undertakes the duties of a skilled occupation must have reasonable skill." And, by the bye, if it should occur to any reader of more artistic impulses to inquire how far all these alarming points of law might possibly be brought to bear upon some question of architectural taste—the detail of the Queen Anne style, for instance—it may be satisfactory to know that the lawyers happily appear to leave everything of that kind entirely out of account, as if it were of no moment at all; so that there is no fear for the present of Mr. Justice Hawkins and a jury of respectable ratepayers being called upon to weigh a mass of conflicting æsthetic evidence in order to decide whether a defendant architect has or has not committed the elastic and expensive offence of negligence in respect of the design of an elevation which half the members of the tribunal have been looking at upside down!

"Reasonable care" looks very much like another matter of difficulty, running indeed in harness with reasonable skill, but on more intelligible principles. Going back to the year 1826, we find that a civil engineer, employed for the construction of a bridge, supplied an estimate of cost, and took upon trust a certain record of borings of the soil which had been conducted by a previous official of the employing committee. These, however, proved to be incorrect, and the cost was said to be considerably augmented in consequence; whereupon the committee refused to pay the engineer his charges, and they were supported by the Court in so doing on the ground of negligence. Whether an expert arbitrator, or even

a jury, would take the same severe view of any such case now may be doubted, for there are so many more risks of misadventure in these days amongst the might-have-beens of engineering, and of architecture too.

Upon the vexed question of the ownership of the drawings prepared by the architect, our authors fully approve the law as it has been declared and held to be settled by the Courts, that the drawings belong to the employer; but amongst some other considerations, they raise the point whether there is any guarantee, either to employer or to builder, of the accuracy of these drawings. To avoid commercial disputes which may arise, they suggest the introduction of "a non-warranty clause" in the specification; but what would be the impression thereby produced on both the contractor and the employer it is easy and yet not easy to say. All working drawings ought to be substantially or "reasonably" accurate, at any rate.

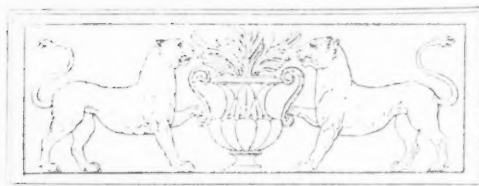
Although an architect is held responsible to his client for all sorts of negligence in the full sense of the term, it is to be understood that he has no corresponding responsibility to the contractor. We have it plainly put on this simple ground: the relation of (so to speak) master and servant which exists between him and the employer renders him bound as by direct contract to supply a reasonable amount of skill and a reasonable amount of care, and failing this he is liable to a claim for any damage sustained by the client. "But no such relation of master and servant exists between him and the contractor, and so he is under no obligation, as far as the contractor is concerned, or any one claiming through the contractor, to show either care or skill in the discharge of his duties"; so that he can only be held responsible to the contractor for doing him damage through "wilful misconduct or misrepresentation amounting to fraud." Said Lord Esher in 1893 in a builder's action for damages against an architect—who, be it observed, admitted the alleged negligence—"The question of liability for negligence cannot arise at all until it is established that the man who has been negligent owed some duty to the person who seeks to make him liable for his negligence. In the absence of contract an action for negligence cannot be maintained where there is no fraud." As it happened that an arbitrator had previously decided that the admitted negligence was not fraudulent, it was therefore held that the architect was not liable; but whether the contractor received substantial justice seems to be a question left untouched. Another point, apparently decided on the same ground, is that for any "negligence" in the granting of certificates for the builder's payment it is to the employer alone that the architect is liable. But surely there must be some way out of these technical difficulties; and, at any rate, it may be remarked that there is but a narrow division sometimes between palpable injustice and technical fraud. With reference to certificates, however, it has to be borne in mind that the conduct of an architect acting under the usual conditions of contract seems amenable to no discipline: he is acting as a "valuer" and not as an "arbitrator," and is pretty much at liberty to "value" as he pleases, and to refuse explanation to the contractor, or even co-operation with him; for, as regards the final certificate itself, "provided there is no fraud in the withholding of the certificate, and no undue influence on the part of the employer to induce the withholding of the certificate, the want of the certificate is a complete bar to the contractor's right to recover. At the same time, neither can the employer in any way "go behind" this certificate when once issued, unless he can prove fraud.

It is a satisfaction to the admirer of fair play to find towards the end of our volume that in two or three chapters "it is proposed to treat of contracts for works from the point of view of the contractor"; and the first piece of advice set forth touches the importance—obviously to both parties alike—of having every building contract put into writing, and made to express as definitely and fully as possible the precise particulars of the work to be done, and the amount and mode of payment. "If no consideration be agreed upon, the law will, once the work is done, presume that the parties intended that it should be paid for at a

reasonable rate; but, until there has been part performance, the law will not enforce it, or give damages for its breach by either party." This does not seem very plain, but there may be some hidden mischief in it, and an illustration of its operation is given in a case where the quantities took the place of the usual specification. The builder was required to carry the work somewhat farther than the bill of quantities went, in order to comply with the plans; he refused; and he was held to be right. Again, we have it pointed out that "in the absence of a condition requiring the approval by some person of the work before payment," shortcomings in respect of its quality, or its compliance with the plans, or the like, will not justify refusal to pay; and the employer's remedy is an action for damages. Thus in the case of a warming apparatus which did not answer, the Judge directed the jury, if they thought it could be rectified without too much difficulty, simply to deduct an allowance for this amendment. Another decision runs, not very clearly, thus:—"The rule is that if the contract be not faithfully performed the contractor shall be entitled to recover only the value of the work and materials supplied." Still another view of the matter is that the contractor may amend the work so long as the time for completion has not expired; and "it is always possible for the employer to set off damages directly arising from the improper performance of the contract"; he can also counterclaim for "other damages of a collateral nature"; or he may pay the contract price in full and then sue for all damages.

When there is a condition in the contract that the work shall be in accordance with the plans and specification, the contractor must adhere thereto, and primarily he cannot recover for deviations not duly ordered; and the architect is not entitled merely as architect to order or permit any deviation not authorised by the employer. In the absence of conditions as to the quality of materials, the obligation is to supply them of "a reasonably good quality," and the same with the quality of workmanship. Then, as regards extras, when it is agreed that they are to be valued by the architect (or his surveyor) this is held to imply that the valuer is also to determine what is extra (or omission), and what is not, "his certificate awarding a certain amount to be due for extras" being "conclusive"—presumably because he is acting in the capacity of a "valuer." Again, if orders in writing for all extras are stipulated for, "where this is clearly expressed the written order is a condition precedent to payment." Fortunately for the contractors, this punctilio is not severely insisted upon; although when dealing with a corporation the question may arise whether, as a corporation, such a body has the legal power as well as the personal will to dispense with it. In all cases of hardship, however, "the Court will endeavour to ascertain whether there has been a waiver of the condition," and also, "if it can be shown that the extra works claimed for are entirely outside the contract, the want of the written order will not bar the contractor's claim." Again, if the final certificate include extras that are within the contract, the question as to written orders will not be allowed to be raised, except fraud be alleged; but as to extras altogether *dehors* the contract, the certificate is not conclusive.

Of course, there are a great many other interesting points of "a little law" which might be alluded to in such a notice as the present; but it obviously goes without saying that the book itself is filled with such matter; and the utmost that the authors—or rather compilers—can desire to claim must be that, as the net result of their labours, such points are placed intelligently and correctly before the reader. So, also, all that the writer of this notice can with any reason presume to expect is that he has met with some success in his endeavour to provoke amongst his brethren an interest in a subject of study which, within professional limits, must manifestly be regarded by the architect, as a practical man of business, to be of the highest importance. It is all very well to say when trouble threatens go betimes to your solicitor; but it is surely better if, by taking pains, one can keep out of trouble.



THE EDUCATIONAL TRAINING OF ARCHITECTS.

BY LEOPOLD EIDLITZ.

A Rejoinder.*

O Heaven! And are these things for ever impossible then? Not a whit!

To-morrow morning they might all begin to be and go on through blessed centuries realising themselves, if it were not that—alas, if it were not that we are most of us insincere persons, sham talking machines, and hollow, windy dilettanti. Which it is *not* impossible that we should cease to be, I hope. — *Carlyle*.

THE motives governing professional discussions on science and art in architecture are apt to be mainly commercial, which means that the well-being and success of architecture are subordinated to the supposed immediate interest of the architect as a genus, and more frequently as an individual.

The methods employed do not refer to the principles involved, but are purely political, in that modern sense of the word which means the pursuit of temporary expedients. The results are disastrous to the profession. In controversies with branches of Government which control public monuments, the architect is invariably put in the wrong by trained politicians, who successfully appeal to the judgment of the masses on grounds of economy, or by a playful indifference to architecture as an art, and by arraigning the works of architects for their shortcomings.

The public has therefore lost faith in the authority of the architect, in the sense in which it respects that of science, law, theology, medicine, or the dicta of Courts, even the opinions of competent mechanics and artisans in their own specialties. The profession, made painfully aware of this fact by salient criticism, proceeds from time to time to enumerate for the ear of the public the scientific attainments involved in the construction of monuments, and the artistic skill in modelling and decorating their masses. Of the latter, much stress is laid upon taste and genius as the motive force which enables the architect to cope with this problem; but as taste is a faculty possessed by all men, and as frequent appeals to public taste place the profession in a measurably

dependent position, the assertion is added that the taste of the architect is especially cultivated by the reading of art history.

This is the last tangible position taken to explain to trained logical minds that there is an actual scientific and artistic foundation to the otherwise patently dilettante talk of taste and genius.

Let me admit broadly that the history of any science or art is an essential appendix to the study of it, provided it be accompanied by a philosophic scheme of education, comprising all the requisite knowledge now attainable. Alone, without connection with such a scheme of education, the reading of the history of architecture may also become valuable to the extent in which it is treated analytically; but when not so treated, it becomes misleading.

When the student sees in history nothing more than a collection of pictures of monuments of various dates, or when, what is worse, he absorbs erroneous criticisms of the author (as I have abundantly shown elsewhere, in the case of Fergusson, the author most frequently consulted by English readers of this day), and when mere reading of history is imagined by professors to be a system of education in architecture, it becomes of questionable benefit to the student who has not as yet mastered the rudiments of architecture or building.

The truth of all this may be sufficiently proven from the dicta of the professional architects who discussed my Paper of the 1st March.

Mr. William Woodward says [p. 219]:—

It does not interfere with legitimate architecture that he may employ such a stanchion, and may enclose it with terra-cotta or stone, and may therefore reduce the area of support. So long as that column is in proportion, it is, I contend, quite a defensible design. I have a case in which I have done it myself, and in this way. I wanted to have a gauged red-brick column. The diameter of that column as designed would not have been sufficient unless a cast-iron stanchion had been introduced into that column; that cast-iron stanchion has been introduced; it has been entirely covered up, and I have been enabled to get my red-brick column, which otherwise could not have been got; . . . and so long as the work is in proportion, I maintain that its employment in that form is a thoroughly defensible and excellent form of design.

Observe the term "an excellent form of design." To this gentleman the history of architecture is nothing but a collection of designs, not of buildings, and he imagines proportion as possible to exist outside of the *mechanical relation of matter*, which relation he admits to have been defective in the case cited. He felt warranted in resorting to this expedient without regard to artistic treatment, which would demand a frank avowal of the metallic stanchion, or, at least, a visible presentation of it in the form of the column; but Mr. Woodward claims to be of sufficient authority, and gives no mechanical or æsthetic reason for it beyond the unproved assertion that, "so long as

* Mr. Eidlitz's Paper, which was read before the Institute on the 1st March 1897, is printed, with the discussion thereon, in No. 9 of the present volume, pp. 213-222.

the work is in proportion," its employment, &c., &c.

It would be of interest to learn where, in what book, Mr. Woodward found the authority for the size of his brick column. I never met with such a book. I fear that he refers to the proportions of columns as laid down in *Vitruvius*, or perhaps deduced from Stuart and Revett, or some more recent measurements of the structural parts of Greek temples. He seems quite to overlook the fact that Greek architects in using these proportions were governed by mechanical reasoning, derived from practical experience. Furthermore, he has evidently omitted to observe that these proportions are necessarily modified by the nature of the load, and the resisting capacity of the material. Greek temples were built of marble; his column was built of brick. Did he take into consideration that a column resists pressure, not in proportion to its diameter, but to the square of the diameter? I say I fear that Mr. Woodward overlooked all this from the fact that in the discussion of a Paper on the education of architects, he failed to state the rationale involving these points, which could have supported his assertions.

Mr. John Slater seems to be aware of the æsthetic formula, "That structural parts of monuments must be *apparently* proportioned to the weight they carry." He says [p. 218]:—

I hold most strongly that the supports of a building ought not only to be actually, but also apparently [meaning visibly] proportional to the weights they have to carry, or we cannot derive any satisfaction from the aspect of the building. I am afraid, however, that if we were to adopt as the text-book of our architectural studies, or our architectural education, the mere mechanical formula of proportion of weight to strains, we should not clothe the dead bones of building with any architectural life at all.

I can only say to Mr. Slater, "Do not be afraid." Nature has attempted the process of clothing the bones of her animal and vegetable creations with great success, and with the universal approval of numberless generations of wise men, including, I trust, Mr. Slater himself, in accordance with the formula of strains and weights, statics and dynamics. I know this to be true, because these formulæ have been deduced from the phenomena observed in nature; and as it is universally conceded that art is the human effort at creation in imitation of nature, the neglect of these formulæ denotes misconception of the nature of art.

I am duly grateful to Mr. H. Heathcote Statham [p. 218] for his politeness in moving a vote of thanks for my Paper, and for his favourable notice of other of my writings, with which he seems to be conversant. I also wish to convey to him my cordial condolence on the melancholy aroused by the apprehension that I recommended the undue pursuit of a new style of architecture, which he might have readily escaped by reading, or listening to the reading of, my Paper. He deems the "new style mania" a fallacy; and so do I,

as long as the effort is premeditated and is supposed to be attained by the straining of the architectural imagination after new forms, or after new combinations of old forms. The proper development of architectural or any other art forms is only possible when it conforms to the laws of nature.

I am now reminded of the great help it would be to our profession if the noun architect and all its derivatives could be abandoned in our art discussions. When the Mediaeval master-mason was translated into the architect, which practically means the same thing, the idea got abroad, and still exists, that the Greek term now means a person not connected with the process of building, but endowed with the faculty of making buildings beautiful to look at.

Of the process of beautifying structures, of the nature of beauty, we get no account in the *Ecole des Beaux-Arts*, in polytechnic schools or universities. Of the differences between the beauty of a church, a palace, a court-house, a library, and a cottage, in the sense in which we distinguish between the beauty of a humming-bird, an eagle, a bull, a horse, a lion or a tiger, or again the beauty of a spinning or weaving machine, a steam engine, a telescope, a theodolite, or a trip-hammer, there is no definition in any educational institution. When you ask for information of the professional architect—Mr. Statham, for instance—you are told that it cannot be explained by any process of definition, but is illustrated by the genius of the architect since 1800 A.D. with what information he can gather from the works of the master-mason prior to 1800 A.D. Hence, read architectural history. Shall I find the why and wherefore in architectural history? No. That you have nothing to do with. That is the special province of the archaeologist. See Professor Aitchison's excellent paper on St. Sophia: he digs deep into the roots of why and wherefore. There you will also find a lucid appendix by Mr. E. W. Tarn, wherein he gives mathematical, incontrovertible proof that the dome of St. Sophia is in a state of equilibrium. The ordinary practitioner would be apt to say that we all know this from the fact that it has not fallen down during these thirteen hundred years, without going into the tiresome process of his mathematics.

"What you need to know," Mr. Statham might retort, "is simply the fact that St. Sophia is beautiful; and when you are called upon to build a St. Sophia, or any other church, or a railway-station, you must make it as nearly as beautiful as St. Sophia as you can."

Now, the genius theory has been pooh-poohed on several occasions by those who know, although the general public accepts it with its mouth open, as much as to say, "We hardly know what to make of it, but there must be something in it."

Most architects talk about it, but for a discussion at the R.I.B.A., there is really nothing more solid to fall back upon than history, time-honoured tradition, and the like. But here comes an American from America, a man without traditions or proper respect for antiquity, and suggests that, after all perhaps, mere recital of historical facts and illustration of historical buildings may prove indigestible mental food to the unsophisticated young student, unless it be accompanied with a mechanical and æsthetic analysis. If you tell your student to follow this historical architecture as a whole, or rather to follow one part of it at a time in his own work, he might answer: "I observe in this history great steps of progress in methods of construction, treatment of material, development of ideas, and their poetic conception. I will accept the history as a foundation, a sort of ground-work for future progress. I will begin where it ends, at 1300 A.D."

But the practitioners and professors might tell him: "This is rank heresy. You see this history is wisely divided into books and chapters. Any one of these books contains a history of a period and of a style complete within itself. Follow whichever you please, and you will become a great architect. But do not argue; do not analyse; do not talk of progress, of the relation between the mechanical development of masses and their decoration, and the like."

I say, when the American from America talks thus in the citadel of learning, no wonder Mr. Statham is indignant, though as host of the occasion his politeness curbs his indignation. He admits that his guest may be right philosophically, but insists that practically he is wrong. And this is strange, for usually Americans are practically right and philosophically wrong.

It would be impossible, says Mr. Statham, to prevent architects from working in styles. As soon as people have any knowledge of these, the human mind is so constructed that they (the architects) must be affected by it. They cannot help it.

If we could catch a generation of architectural students, take possession of them as soon as they are born, and keep them out of sight of any buildings, then send them to a desert island, and keep them away from a knowledge of any books or history, and tell them to construct buildings to suit their purpose in the best way they can, I suppose they might then evolve something new! But we are not in the position of people before the ages of printing [p. 218 *ante*].

To sum up the above, it amounts to this:—The authors of the cathedrals evolved them spontaneously, not because they understood methods of evolution of architectural monuments in general, but because they *did not know* how other monuments, such as pyramids, temples, theatres, basilicas, &c., had been evolved by prior authors of monuments. In fact, to the mind of Mr. Statham, evidently, there has at no time been an

intelligent process of reasoning on the creation of architectural monuments, but merely a spontaneous inspiration which culminated in the cathedrals.

It seems to follow that but for the invention of the printing press, engraving, photography, and the facilities of travel made possible by the steam engine, the architects of to-day would be creating monuments as far superior to the cathedrals as the cathedrals are to the pyramids.

An intelligent analysis of antique and Mediæval monuments, such as may be found in several historical and archaeological works, shows a continual progress in art development, resulting purely from progressing methods of construction and treatment of material, the conventionalising of natural organic forms to fit them for structural decoration, and a rigid adaptation of these decorative features to the organisms of construction, with a view to emphasize their expression. This progress denotes not ignorance of the past acquisitions of architecture, but a continuous mental effort to improve and add to them. It is possibly true that Vitruvius never visited Greece, but the most cursory glance at Roman monuments shows their Greek elements. The Romans changed forms to adapt them to Roman uses merely, rather than to progress in the art of architecture—hence much of their failure. Mr. Statham seems to think that the want of photographs of Greek temples, and of a convenient railroad to Athens, implies ignorance of Greek architecture, in spite of the internal evidence of Roman monuments to the contrary. This proves the inefficiency of the present system of teaching the art of building with expression by the mere reading of architectural history, for the sufficient reasons:

(a) That architectural history is not supplemented or preceded by instruction in the mathematical reasoning which governs the relation of matter in an architectural organism when created by man in imitation of nature. Instruction in the science of mechanics (the sole guide to a proper relation of masses) should take into account the mechanical function of these masses, and the resistance to external force of the material of which they are composed.

(b) That the arithmetical relations of structural parts (as laid down by various authors) of temples, churches, and other structures, are nothing more than surveys of individual monuments, and cannot be applied in that form to structures of different materials and magnitudes, without reference to the laws of mechanics.

(c) That while relations of masses in antique and Mediæval monuments are based on the mechanical knowledge of the times in which they are erected, that knowledge was entirely empirical, and must be reconsidered in the light of the positive and accurate knowledge of our own times.

(d) That methods of moulding, decorating, and

colouring structural masses are the means of accentuating these structural elements in their mechanical functions. To elucidate this subject with a reference to historical monuments exceeds the scope of this Paper, and I can only refer to chapter xxii. page 316, of the *Nature and Function of Art*, where I have cursorily touched upon the principles involved.

(e) Every science and art has its history. The main object of all these histories, as taught in educational institutions, is to collect in chronological order the development and progress of the past (sometimes also its retrogression), with the sole view that the student may judiciously use the knowledge acquired up to date in its totality in the further pursuit of the science or art he may select as a field for future action.

To add to past experience by present action, to group and to deduce general laws from isolated historical facts, and to extend recognised laws over recent experience, is the aim and pride of every student. No, not every student; the student of architecture under the present system of instruction is a notable exception. He is taught, or induced to believe, that architectural forms are nothing more than a fashion of the time in which they appear in history, complete within themselves, and entirely unrelated to any fundamental system of either science or art, and that, whatever mental motive there was for changing them now, it has no potency.

(f) Under these conditions, progress in architecture becomes impossible. Decadence sets in, and has been prevalent for six hundred years. Architects have lost the meaning of functional members of structures. Professor Hosking, an eminent British authority, speaking of buttresses and cornices, says, "that they were (once upon a time) abutments and wall coverings cannot be doubted, but now their function in architecture is to throw a shadow over uninteresting surfaces of compositions." He has in mind a drawing and not a building. See chapter iv. p. 51, *Nature and Function of Art*.

Mr. Woodward thinks a pillar must be so many diameters high, whether built of marble or brick, whether it sustains the pediment of a portico or a three-storey house. Staircases, originally constructed of stone, have been imitated in wood, retaining much of their original form; and now stone staircases are built, supported upon wrought and cast iron frames, in imitation of those wooden stairs. Stone arches of enormous voussoirs, far too large for the loads they carry, have attenuated abutments. Imposts of doorways and other openings are made of wood; iron and copper cornices in imitation of the form of the Greek marble cornice are fastened with iron straps to the face of brick walls, &c. The meaning and purpose of structural elements are not considered, and the forms themselves, without reference to function or materials,

are applied to constitute what architects call "an excellent form of design."

The idea of building is lost, and the design has become a feature to captivate unwary laymen.

(g) Unwise men cry out for a new style; wise men deplore the fact that with the great changes in fundamental ideas, with the progress possible by accurate knowledge of construction, and with the constant introduction of new materials, not only do architectural forms betray no progress in the art of architecture, but it is evident that the art forms of the past are misunderstood in modern attempts at pure imitation, and that the motives and principles which first called them into being are not now regarded as a logical system, a philosophy of building, and an art development of expression. When we ask why it is that architecture alone of all arts and sciences is taught without a textbook which explains the mathematical nature of construction and the methods of accentuating construction by decoration, by means of conventionalised natural forms distributed and arranged again with strict reference to mechanical strains, we are told that "it might be right from a philosophical point of view, but it cannot be done." What cannot be done? That we should endeavour to carry out architecture as people carried it out before the fourteenth century, without reference to precedent.

Now Mr. Statham has written a very interesting book on *Architecture for General Readers*. So I take the liberty of quoting from its preface such passages as show the drift of the author's mind in regard to architecture as an art:

Architecture, he says (in the only point of view in which it is worth the regard of thoughtful people), is the art of erecting expressive and beautiful buildings. . . . A building can never be beautiful, architecturally speaking, unless it has expression. What do we mean by expression, the author asks. . . . The human figure is capable of expressing feeling by looks and actions. Expression in this sense a building cannot be said to have. It may reflect the emotion of those who designed it, or it may express facts of internal structure and arrangement.

In a more restricted sense, a building may express constructive facts, its plan and arrangement, even its purpose. It ought to do this, unless the architecture is to be a mere ornamental screen for concealing prosaic facts.

Then a design is dependent on structural conditions also, and if these are not observed, the building will not stand, and hence it is obvious that the architectural design must express these structural conditions; it must not appear to stand, or be constructed, in a way it would not stand (like modern shop fronts), and its whole exterior appearance ought to be in accordance with, and convey the idea of, the manner and principle on which it is constructed. The interiors must be shown as such externally by emphasis of treatment.

In Mr. Statham's book we find also an adumbrated notion that architecture is, like music, a metaphysical art. The parallel cannot be said to be defined beyond the broad statement that the analogy is very close, and that "there is in architecture, as in music, something which defies

analysis, which appeals to our sense of delight we know not how or why, and probably do not want to know."

It is touching to notice how the author here takes the reader into his confidence while speculating earnestly, and yet not without vivacity, on the nature of art. There is no spirit of condescension "to the general reader" whom he desires to instruct, and yet it is well known that this general reader is ill prepared to receive instruction on this abstruse subject. And again, the author is doubtless right in selecting the general reader for an audience in preference to addressing the professional architect, who is not apt to be docile under instruction, or in the discussion of any statement which on the spur of the moment seems to him to be heterodox. I say it is touching to see the author taking the reader into his confidence while speculating upon the nature of architecture as a fine art, because the discussion of the subject, as far as I have quoted it, and indeed as far as I can discover it in reading the book, seems nothing more than speculation. It nowhere culminates in a final definition of architecture such as a professional architect may grasp and realise in practical professional work. And yet how near he comes to it, not in its entirety, but in its elements! How vividly he thinks of it, unfortunately not as a building, but as a design! The ground plan must be felt in the elevation, and so must methods of construction. As a whole, it is a species of music, imponderable, metaphysical. "We know not how and why, and probably do not want to know." Thus the author abandons the idea of connecting the material in building with the spiritual, which alone he considers to be the art effort. He ascribes it to the inspiration of genius. He says (and so say multitudes of professional architects, whom Mr. Wight of Chicago has dubbed "the conservative school"): "Let us try to imitate the geniuses of the past as displayed in their works. Let us read history, and trust to providence."

The devotees of natural science not very long ago underwent a similar mental process. Light, heat, electricity, remained inexplicable as phenomenal entities, other than as imponderable matter, until they were demonstrated to be not matter at all, but conditions of matter. It is even so with architecture, and with all art. We find in it something imponderable, and we attribute its existence, as Mr. Statham has it, to "the spontaneous eruption of genius," to "a metaphysical similarity with music," to "something, the how and why whereof we do not know." But then the author of *Architecture for General Readers* turns to the subjective effect of architecture with some degree of success. He says, as it were: I do not know how architectural monuments acquire the spiritual property of art, but I know how we are affected by this spiritual property. I do not know

why it is so much like music, but I do know what is our feeling when we behold it. We find it beautiful and expressive. Yes, architecture is the art of erecting expressive and beautiful buildings.

Now, the translating of an objective condition into its subjective results does not amount to a definition.

Count Rumford did not content himself, in defining caloric, to say that matter combined with it feels hot to the touch, and when it is withdrawn it feels cold. He said: I have weighed matter hot and cold, and find no difference of weight. I have produced sensible heat by friction; hence caloric is not matter, but a condition of the motion of matter.

A definition of the beautiful and of expression will help us to realise the extent to which function (ground plan) and construction enter into the creation of a true work of architecture. The works of nature, we all admit, are beautiful and expressive. The degrees of beauty and expression realised by the observer vary with his capacity to observe. The ornithologist will explain to you how a sea-gull flies. He knows the nature of the mechanism required for the purpose. He has examined it anatomically, and analysed the tissue of its muscles chemically and under the microscope, and if he is poetically inclined, he will wind up his discourse with a description of the expressive form of the bird, and its grace of motion while flying around a steamer crossing the Atlantic. It is most beautiful indeed; beautiful to look at, he will tell you. If you are a wise and modest man, you will feel overwhelmed with the material facts revealed to you, and render your tribute to nature in admiring silence. If you are dilettante, you will observe complacently that you always thought it was a beautiful sight to see a bird cleave the air in its flight.

Thus a vague conception of the beautiful is the alpha, and an intelligent realisation of expressiveness in nature is the omega of one and the same impression. In nature form betrays function, and our ideas of beauty are proportionate to the degree of this expression as realised by the subject. It stands to reason, therefore, that the degree of beauty realised is both subjective and objective—in all cases, however, our appreciation of the beautiful in nature, as well as in art, is nothing more than the surprise at the art force displayed by the author of a work of art, or by nature, and amounts more or less to the degree to which we are familiar with the object in question; hence it is that objects of great beauty often fail to excite admiration in the ignorant.

To sum it all up, we must come to the conclusion that form, expressive of function, constitutes objective beauty, depending entirely upon the perfection and accuracy of expression attained.

Architectural monuments are works of human art in imitation of nature, not in imitation of

forms existing in nature (for there are no such forms), but modelled, in their organism, in accordance with the laws of nature. The greater the accuracy in the application of these mechanical laws, the greater the expression of the organism, and the greater its beauty, if that is the ultimate object.

Statistical relations of matter manifest themselves by local strains. When external strains are resisted by the internal atomic cohesion of matter, there ensues statical equilibrium, which in art forms is called repose—an essential element in producing satisfaction in the beholder.

The elements of expression, strains and space (dimension, mass), constitute structural form, the same as sound and time constitute music—hence their analogy. It is entirely physical, and not at all metaphysical, and we may know it. In music notes too high or too low produce discord. Frequent discords and irregularities in time result in a jumble unintelligible to the ear as an expression of an idea. At the present time, and for the last six hundred years, we work in styles. Mr. Statham tells us that we cannot help it. Let us see whether we can or not. In the first place, it is not strictly true that we work in styles. The Greeks expressed certain simple tangible physical ideas in architecture in the manner of simple tunes in music. These tunes are again simple architectural forms. These forms we imitate as forms, without looking at the Greek score for their elements. When we have to express somewhat complicated "motifs," more complicated than those of the Greeks, we do not write a new score in the style and on the principles upon which Greek architectural music is based; but we repeat Greek tunes over and over again under the childish notion that a simple tune repeated constitutes a symphony or an opera. Men like Schinkel and Stracke of Berlin realised the fallacy of this proceeding, and their partial success in Greek architecture is attributable to a fine ear for music and a lively musical organisation. That they did not ultimately and perfectly succeed is owing to the fact that they did not write their new score in the light of musical progress since the days of Pericles.

Gothic architecture is a symphony of many "motifs," physical and metaphysical. The latter have frightened the general public and the majority of architects into the arms of the Renaissance—the style of repeating the Greek tune over and over again in the same structure, no matter what its motif or capabilities of construction—and into the so-called styles and types arising from and related to it. By those architects who, in admiration of the Gothic symphony, still persisted in imitating its forms in spite of their spiritual expression, which is not in accord with the spirit of our own time, much good work has been done in England and Germany, but nowhere has the score been revised in the scientific sense possible

now, which process alone would enable us to utilise the scientific and artistic basis of all monuments of the past, also the scientific and æsthetic elements as they exist at present, without retaining the expressions peculiar to past periods which are not in accord with the ideas of our own times.

It would lead me beyond the permissible limits of this Paper to bring before the mind of the reader the perverse and illogical process of conceiving a scheme for a proposed structure now commonly pursued by the professional architect. In the first place, he has in mind not a building, but the design for a building, which shall please the owner, a committee, or perhaps be exhibited for the approval of the public. In the next place, the order of the ground plan, methods of construction, selection of material, in fact, every expressive element or feature pertaining to colour and form, are pervaded by the dominating idea of style. Style, it must be remembered, as it exists in the brain of the author; not as a mechanical organism, but as a picture, the lights and shades of which are expected to produce effects judged of as desirable, or, under the circumstances attainable, pleasing to the author, the proprietor, the public; not eminently something which grows out of environment, whether it be modern or ancient.

It would lead me too far to enter upon the methods in detail which *should* be pursued in composing a structure. Let it suffice to say that next to a development of single cells and their connections which are to serve the ideal use of the person, or groups of persons, who occupy the structure, the laws of mechanics must be the sole guide in the development of its form.

A critical analysis of mechanical strains must be instituted, not only for the purpose of ascertaining whether all the parts of the proposed structure are sufficiently strong to sustain their load, but whether throughout the structure the strains are resisted *harmoniously*. I say *harmoniously* with intent to convey the idea that they are not to be resisted throughout the structure with equal facility (this would be monotony of expression), but with a vigour proportionate to the function of each part of the structure.

Many of our colleagues are doubtless confident that long practice enables them to detect want of harmony (insufficiency or excess of strength) by merely looking at the design for a building as a whole or in part.

Admitting that this is possible within the range of certain routine limits for structures which can hardly claim to be architectural monuments, such as shops, tenements, or small factories, the eye is a poor guide to a sound judgment in the matter of construction, proportion, or beauty in art.

Many practitioners consider themselves prodigious judges of the strength and beauty of structural forms. All they need to do is to look

at them to find out whether they please them or not. If they would start the practice of accompanying original sketches with a strain sheet, they would find that in many cases their conception of forms is entirely at fault, and in almost all cases it needs considerable filing, with the further result that in the treatment of new problems the forms indicated by mathematical analysis will always prove more or less of a surprise to them.

Mr. Arthur Cates [pp. 220-22] does not approve the suggestion contained in my Paper, mainly on the ground that its aim seems to him to be the evolution of a "new style." In fact, it only treats upon evolution of any kind in contradistinction to the stagnation and deterioration which doubtless exist, and are purely the result of mistaken methods of education, or, to express it more accurately, of the education of architects in the way in which they at present practise their profession, and not in the way in which they should study their art.

Not to leave us in doubt upon this subject, he recommends a general education "on a level with the average of the architect's clients in knowledge of all ordinary topics of art and general history, and superior to them in his special and technical knowledge."

The answer to the salient question, "What this technical knowledge is to be," is somewhat obscure. He says:

His success will depend on his application of the capabilities of the materials he used, and will be the greater as he may have been blessed with the divine inspiration of artistic genius, and have cultivated and developed it by earnest study, of which mechanical and constructive details would not have occupied the most important part.

This means, whatever the architect's success, it will not depend upon his technical knowledge. What will it depend upon? Divine inspiration, by the study of history, mastery of drawing, &c. What will it produce? Mr. Cates tells us:

In the complex conditions of the practice of the day the architect must aim at acquiring the power to attain success in designing buildings which shall be convenient and appropriate in arrangement; shall be of stable construction; and shall be of suitable and beautiful design, both as regards masses, form, and detail.

I am of opinion that mass and form are mechanical relations of matter, and detail, like unto them, is expressive of those relations. Mr. Cates thinks not. How is this question to be decided? By history!

Six hundred years have passed since the building of the cathedrals, and to the history of these six hundred years I appeal for a decision of this pregnant question. What has divine inspiration done during this time in the development of masses, form, detail, architectural monuments, and decoration? Why, nothing! The very same bases, capitals, architraves, cornices, egg and dart mouldings, dentils and triglyphs, which were the

Greek style properties of Roman architecture, are current to-day, rudely misapplied in many cases, often inappropriate to the material employed, and never the result of original analysis.

Ground plans are forced into preconceived forms without reference to the function of single cells. When the architect meets with a refractory iron beam or girder, does he treat it as a structural element to be enriched and decorated in accordance with the nature of the material? No. It is covered with some sort of boxing of wood, terracotta or plaster to represent a stone girder, which girder, were it really of stone, would break under its own weight. This girder is supported by wall brackets, which, were they real, would shear off under the load, and when the architect finds it all somewhat unsatisfactory, he paints it in imitation of oak, black walnut, or mahogany. Away with it! I can discover no divine inspiration there.

All this talk about general education enough to talk to clients, of temperance and honour, is, to say the least of it, a mere sham.

Engineers, lawyers, doctors, chemists, electricians, all have a fair general education, a knowledge of the history of their special science, but besides this, they one and all study the natural laws which govern the practice of their profession. No one relies upon divine inspiration for doing scientific or art work; it is not accepted as a basis of reasoning at this end of the nineteenth century. No matter what expression a monument conveys, the language in which it speaks is a relation of matter, just as in music the language is a relation of sounds. To those who do not understand either language, an approximate idea of its meaning is conveyed, which leaves a mental impression in the direction in which it is intended to convey thought of more or less intensity.

To the musical composer, and to the architect, who by his training is able to read his music in stone, this impression amounts to a knowledge as definite as that which enables the scholar to read a poem. When Mr. Cates hopelessly cries out: I cannot see how the future text-book on the theory, practice, and art of building will teach me the language of structural monuments, and how the facts which govern resistance to mechanical strain form the keynote of architectural composition, it proves but one thing beyond peradventure—that this text-book should be written at once, and that it is high time that its use be enforced in schools of architecture.

I cannot close this Paper without returning my cordial thanks to Professor Aitchison for his kind reception and courageous defence of my Paper (in the face of overwhelming opposition), purely in the interest of art.

New York, 31st July.



HOLYWELL PRIORY, SHOREDITCH.

By E. W. HUDSON [A.].

Part I. (History) [continued from page 436.]

1542.—After the surrender, the site was granted by the King to George Harpur, with a messuage and garden; and three years later it was granted* by letters patent to Henry Webbe, Gentleman Usher to Queen Katherine Parr, who wrote the following letter on his behalf,† specially urging a speedy completion of the sale of the property:—

By the Quene.

Kateryn the Quene Regente K.P.

Right trustie and well beloved we grete you well.

And forasmuche as we ar informed by creadable reporte, that, at the time of the surrendre taken of the Nonerye of Hallywell, my lorde the King's ma^{tie} will and pleasure was, that our trustie and welbeloved servant Henry Webbe, gentilman huisher of our privie chambre, shulde have the preferment of the house and demeanes of the same. Albeit, after that, meanes were founde to defeate him, that he had but onely the house, chambers and certein gardyns lyeng within the precynete of the same, amounting to the rente of vij^{li} yerelye, as by his indenture moare playnly it doeth appere. Sythens that time, he hath byn in suite for the purchas of the hole, and hath had the pertyculars long time in his custodie. Wherefor in consideration that our saide servant never opteygned the hole benefytt of his first grannte, but that the best parte of the said demeanes was holden from him, and so contynually is lyke to bee.

We shall hartely desire and pray you to be so favourable to him at this oure earnest request as that he may for his monye have the purchas at youre handes of the said vij^{li} whereof he hath th' indenture. And in declaring youre kinde and loving frendeship towards him effectuouslye at the contemplacion of these oure lettres we shall gratefully accepte it, and also thankfully remembre it whensoever occasion shall serve us to doe you pleasure. Yven undre oure Signet at my lorde the king's ma^{tie} Honoure of Hampton Courte, the xxiiij of July, the xxxvjth yere of his Highnes most noble reyne.

To whom this letter was addressed does not appear. The year is 1544, the Survey and Report is dated 1st Sept., 36 Hen. VIII., and the final Grant, 23rd Sept., the purchase money being £136. Susan, Henry Webbe's daughter and sole heir, married Sir George Peckham. His title to the property is given in *Lans. MSS.*, vol. iii. p. 51.

Subsequently we read that "Many houses have

* The text of the Survey for the Grant will be given in the appendix to appear in a future number.

† Cotton MSS., British Museum.

been there builded for the lodgings of Noblemen, of Strangers born, and other." Probably some of the old materials were used for these buildings.

1559.—Twenty years after the Dissolution, in the first year of Elizabeth, another grand funeral procession set forth, now from the churchless Priory instead of towards it, viz.:—

From this House was carried the corps of the Lady Rutland Oct. 21, to Shoreditch Church, with 30 Clarkes and Priests singing: about threescore poor Men and Women in black Gowns. Mourners to the number of an Hundred. Two Heralds of Arms, Garter and York. Then came the Corpse; afore a great Banner of Arms: and about Her four goodly Banner Rolls of divers Arms. Mr. Becon preached. After was dispersed a great Dole of money, being 2^l. apiece. And so all departed to the Place to Dinner. About the Vallance was written: *Sic Transit gloria Mundi.* (Strype.)

1576.—The site was now being cut up for various purposes. There is mention of a lessee in this year, one Giles Allen, who sub-leased a parcel of land to James Burbage of London, joiner, who, it is interesting to note, built thereupon "The Theatre," which existed for some twenty years on a portion of the site of the Priory, abutting upon Holywell Lane.

1592.—In this year, and fifty-three years after the surrender, a list of religious establishments, *inter alia*, records under the head of Convents for Women "that of Holiwell by Shoreditch." The only way to account for its existence in the thirty-fourth year of Elizabeth is that it was rehabilitated by Mary in the undemolished Priory buildings some time during the short revival of Romanism, and that the establishment lingered on in a decadent state for over half a century, side by side with theatre, tannery, market-gardens, desecrated well, and new houses for the aristocracy skirting the main road, until finally the last nun was laid to rest, and the ancient cemetery, where for five hundred years the Sisterhood had found sepulture, was closed for ever—a true epitome of the change in English life and customs in the nation at large. On the other hand, there is the fact that the Prior and brethren of St. John of Jerusalem, Clerkenwell, reinstated in 1557 and estates restored by Queen Mary, were again suppressed in the first year of Elizabeth (*Tanner*); and those Black friars who attempted to rebuild St. Bartholomew's nave were promptly stopped by her.

In this year, on 9th March, was carried from Haliwell, where she died, the body of Elizabeth, widow of Bishop Scory, and interred in Shoreditch old church under a marble tomb "of the composite order." Her husband was successively Bishop of Rochester, Chichester, and Hereford, *temp.* Edward VI. and Elizabeth. In Queen Mary's reign he put away his wife, and did penance for being married, at Bishop Bonner's instance, and though he obtained absolution, he lost his bishopric of Chichester. Elizabeth afterwards promoted him to the See of Hereford, and he died in 1585.

There is very little to be gleaned respecting the

Webbe and his son-in-law, Sir G. Peckham. Then we find it recorded, "the grocers have the lands," but as this was in connection with the source of income for the chantry priests, it probably referred to property in the City—Cornhill to wit (?). Reversion to the Church may have taken place in Queen Mary's reign, when no doubt the nunnery was reinstated.

1734.—Seymour (who announces his *Survey* as an "improvement upon Mr. Stow") tells us (p. 727)—

In Holywell Street is a Still-house known by the name of the "Holy-well Still-house," belonging to which is a curious large well called the "The Holywell," from which the street takes its name; which well was a place of great resort in the Romish Times, when that which is called King John's Court was a Priory.

Again:—

The last remarkable Place is King John's Court, which is a very antient Building, situated near Holywell Lane.

If we may rely upon this as the result of actual survey, there were habitable buildings then existing which had been parts of the Priory. This is confirmed by a survey made eleven years later, as hereafter mentioned. Seymour may be trusted, no doubt, as to there being a still-house, although it is difficult to fix its position in Holywell (*High*) Street, and yet give it access to the well on Bateman's plot so far away. He, however, got into confusion over other wells, mistaking that off "The Strand" for the one, the subject of inquiry, as is noted by Maitland and mentioned p. 238 *ante*. In our own day too, Eliza Cook, or her annotator, falls into the same error in regard to the subject of her poem, "The Holywell." The sentiment, however, has of course a general application.

1745.—Chassereau's *Survey of St. Leonard's parish* made. Fig. 2, p. 470, is enlarged from it.

1788.—A writer in the *Gentleman's Magazine* of this date says:—

In Holywell Liberty is, or not many years since was, the (holy) well from which the Liberty is named, formerly as much renowned for miraculous cures as now it is slighted.

1799.—There is an excellent survey of London, Westminster, and Southwark of this date published by R. Horwood to a scale of two feet to a mile, showing every building on the Priory site. The west side only of New Inn Street was then built; Anning Street existed as "Plumb-pudding Row," and across Holywell Court was a double row of houses called Foster's Buildings. Bateman's plot is partly built over, but the well is not shown.

1822.—There is a memorandum of this date in a *Nineteenth* new edition of Dugdale, stating that the chief freeholder of the site at this time was a Mrs. Newsam of Hackney.

1843.—Stonework of a subterranean doorway

and "some other remains underground at or near 'The Old King John,'" sketched by Mr. W. S. Hendry [*Notes and Queries*, vol. vii. 1853].

1862.—North London Railway extension begun, when the above public-house was pulled down. The owner was Mr. Thomas Reece, of Kingsland Road.

1863.—Discovery of two leaden coffins in King John's Court during Main Drainage Works (to be described in a future chapter under the heading "Buildings").

1867.—North London Railway widening projected. Subsequently, during construction across the site, "several articles and stones were unearthed in the neighbourhood of Holywell Lane." Several skeletons were found and "reburied, or bricked up in the pocket-arches of the bridge in King John's Court." Relics of mortality, to be perhaps one day rediscovered by some antipodean antiquary, as being the bones of nuns walled up alive for broken vows! No record was kept of the "articles and stones."

1896.—A brick-stained well found opposite No. 200 High Street (p. 237 *ante*).

1897.—The oldest houses on the site are on both sides of New Inn Street, which, although one thoroughfare, is separately named and numbered (1 to 7 and 8 to 14) from New Inn Broadway, and the point where these meet represents the southern boundary of what was "Bateman's plot," clearly marked by the difference in the width of the street and the age of the houses. As this plot was vacant at the date of the latest of these old surveys, it is certain that they are the original houses built towards the end of the eighteenth century. Over an arched entry into a court close by is an oval tablet inscribed "T. R.—SOCRATES PLACE, 1787." These houses are very dilapidated, and must soon, in the ordinary way, disappear.

Behind Nos. 5 and 6 is the site of the "Holywell" (p. 237 *ante*). The remainder of this plot to the west is occupied by a large Board school built in 1877 on what was a timber-yard, and the playground is behind the old houses above mentioned.

No REGISTER of the Priory is extant, but in a book in the Bodleian Library is a MS. note which refers to a "*Domesday of the Nuns of Haliwell*." Nothing, however, is known of such a work.

An account of the arms, seal, and founder, and notices of buildings more nearly connected with those of the Priory, its relics and ruins, are reserved for a future part, having, perhaps, more general interest for an architect.

(To be continued.)



9, CONDUIT STREET, LONDON, W., 23rd September 1897.

CHRONICLE.

Brussels Congress.

The President, Professor Aitchison, A.R.A., has kindly furnished the following account of his recent visit to Belgium, and of the proceedings at the International Congress of Architects, held at Brussels under the auspices of the Société Centrale d'Architecture of Belgium:—

I was one of the members of honour invited to the Brussels Congress, and owing to an appointment being put off was enabled to attend. I reached Antwerp on Saturday morning, 28th ult., and was warmly received by M. J. J. Winders [*Hon. Corr. M.*], who showed me over his own unfinished house, which is built, and being finished in the old Flemish style; and though all of it has been most carefully designed, one of the ceilings is particularly elegant. M. Winders then took me over the Museum he built, a stately building with a Corinthian portico, and admirably lit for the pictures and engravings; and, after showing me the town, took me to the Zoological Society, where a new hall and staircase have been lately built, the columns of which are of the pink and white porphyry of the Alps, with bronze bases and brazen capitals. Attracted by the fascinating personality of M. Winders, I stayed the night at Antwerp, and joined the Congress at the Exposition at Brussels, on Sunday morning. I was there introduced by Mr. John Slater [*F.*] to M. de Bruyn, the Minister, and to M. Dumortier, the President of the Belgian Central Society of Architecture; to M. Newnham, Vice-President of the Central Society of Paris; to M. Acker, and to other distinguished members of the Congress, and met there Dr. Cuypers and M. Ch. Lucas.

About 1 o'clock the members proceeded to the Palace of the Academies, and the members of honour were conducted by the Minister and M. Dumortier to the vestibule to wait the arrival of His Majesty the King of the Belgians. On his arrival His Majesty most graciously spoke to each member present in his own tongue, and inquired after the progress of architecture in their several countries. His Majesty told me, in English, "that he had a house at Ostend, whither he went for a change

in summer and winter, built for him in England, and said it was perfectly convenient and comfortable; that it kept him cool in summer and warm in winter." The members of the deputation resumed their seats in the Council Chamber when His Majesty and his attendants were seated in the royal box. After the introductory speeches of the Minister and M. Dumortier, the President of the Royal Institute of British Architects was asked to speak, and I said a few words in English. M. Dewaele then read his Paper "on Restoration," and after some discussion, and an eloquent speech by M. Ch. Lucas, I contributed some remarks to the effect "that nothing could be said against restoration that was merely necessary repair possible to be done; but that the so-called restoration of carved work, of which no trace was left and no drawing or model, was simple forgery, that falsified the building, giving nothing of the old, and but the faintest trace of the skill and taste of the present."

From my mistaking the place of meeting and going to the Exposition, I missed the preliminary conference on Monday morning. The whole company met at the Hôtel de Ville at 12 o'clock, where they were received by the Burgomaster, M. Ch. Buls [*Hon. Corr. M.*], and shown over the building, and were then taken in carriages to view the Palace of Justice, the Palace of the Fine Arts, and the Palace of the Nation, and in the evening there was a banquet in the Hall of the Royal Society of Harmony.

On Tuesday morning at 9 there was a meeting at the Central Society's rooms at the Bourse, where M. L. Bonnier read his paper on the question, "Should there be a diploma for architects?" and M. De Becker read his paper on the same subject. I made a few remarks on this question, in French, which will be found in the Proceedings of the Congress.* The whole company then went by rail to the ruins of the Abbey of Villers. An address on its history and peculiarities was given by M. C. Licot on the spot, and many of the company were taken round the ruins by M. De Becker, to whose hands the restoration has been entrusted. Unfortunately a heavy storm of rain came on just as the ruins were lit up with Bengal fire.

On Wednesday, at 7.30 a.m., there was an excursion to Antwerp, but as I had so lately been there I did not go.

At 9 on Thursday papers were read by MM. Brunard and Janssens, and by M. G. Maukels on "What are the means of securing to architects the artistic property of their works?" with discussions and a vote. The whole party then went to Tervueren, where there is an interesting exhibition of the arms, instruments, animals, and productions of the Belgian Colony on the Congo. There were curiously worked

* These are the *Compte-Rendu* of the Congress, which will be found in the Institute Library when published.

weapons in copper, bronze, and steel hung on the walls, as well as musical and other instruments, and photographs of the country and its inhabitants. Life-size groups of the natives by Belgian sculptors were placed in the rooms. Lunch was taken here, and the President R.I.B.A. was asked to return thanks for the ladies. He made a short speech in French, in which he said, "Presque tous les hommes ici sont des architectes et en conséquence amateurs du Beau, et j'espère de la belle aussi."

In the evening all the members of the Congress were invited to attend at the opera, where *Carmen* was given. An appointment was made to meet at the Bourse at 9 on Friday morning to discuss the proposed restoration of the Convent at Belem, in Portugal, by M. Pedro d'Avila, and it was agreed that there was no occasion to rebuild the modern tower that has fallen down.

The following is the substance of my thanks to the Central Society of Belgium as President of the Royal Institute of British Architects:—

"Mr. President and Brother Architects,—It was with the greatest pleasure that I received your kind invitation to attend this Congress, and was glad that I was able. It has given me the opportunity of seeing the beauties of your capital, of becoming acquainted with your architects, and of being introduced to many of the celebrated architects of the world; while it was flattering to be asked to give what assistance I could in solving those burning problems that we hope may help our beloved art. Flanders, to use its old name, has always been noted for its skill in the visual fine arts, in architecture, painting, and sculpture, and also in those branches of artistic workmanship that have given to mankind so much instruction and delight. How many of the glorious stained-glass windows in the world owe their realisation to Flanders, not to speak of the tapestries, the armour, the iron-work and other artistic productions, it would be wearisome to name. Many of the heavenly windows of Italy owe their realisation to the Flemings; and who knows how many others in the different countries of Europe? In England, at least, we owe a church in Gloucestershire to the admiration excited by some stained-glass windows plundered from a Flemish galley; many of our palaces, castles, and country-houses owe the enrichments of their walls and floors to Flemish looms, while our first Exchange in London was designed by a Flemish architect. In a society consisting almost wholly of architects, our own master art is not likely to be forgotten. We all know the instruction and delight we have obtained from all the other fine arts that have ever flourished; but while their masterpieces have become the cherished possessions of every civilised nation, we have to go to these nations themselves to see the masterpieces of their architecture. Oblivion alone would be the

lot of such dumb nations as Egypt or Mexico, if their architectural monuments had been destroyed. Architecture, too, as M. Ch. Garnier has said, is an obtrusive art, and cannot be hidden away like a picture, a statue, a poem, or a piece of music. In the name of the Royal Institute of British Architects I beg to return you its thanks for the honour you have done it in inviting its President to your Congress. While I personally have to express my gratitude for the honours bestowed on me—not the least of which was seeing your revered Sovereign take interest enough in our art to preside at this Congress, as well as to the interest he took in the progress of English architecture—I am indebted to the Central Society, now celebrating its twenty-fifth anniversary, for its warm-hearted reception, and for having given me the opportunity of meeting so many distinguished architects, and of taking a part in their deliberations, and to your Royal Academy for the great honour it has done me in making me one of its Foreign Associates, of seeing that grand modern building, the Courts of Justice, and of observing the originality, the care, and the artistic skill displayed in the recently built houses in Brussels. In the name of the Royal Institute of British Architects and in my own I wish success and long life to the Central Society. I indulge in the hope that is cherished by every architect, that at the end of this century, which has made so great an advance in knowledge, architecture may enter on one of those epochs of glory that have stamped the civilisation of other countries in times long passed."

M. Charles Garnier and Mr. Phené Spiers were prevented from attending through illness. Our old friend and Hon. Corr. Member M. Ch. Lucas, from whom we have always received so much assistance and information, was very enthusiastic over our Examinations; and I was glad to find that there was a general agreement among the members of the Congress that the Royal Institute of British Architects was not only the largest, but also the most important Architectural Society in the world.

After the Congress I met Dr. Cuyper at Amsterdam, and saw his two grand works there, the Museum and the Railway Station, the latter about a thousand feet long. The buildings are of brick with stone dressings, adorned externally with tile panels of monumental colouring, illustrating historical scenes in Holland. These two buildings are vaulted, and at the Museum the lighting of the pictures is admirable. Dr. Cuyper has hit upon a scheme for making the box girders used architectural by means of painting; a broad band of gold on each side of the soffits gives an air of ornament to the rivets, and the rest of the girder is painted in strong but harmonious colours, while the vaults are of the natural colour of the pale-yellow bricks, with floral ornaments bordering the vaulting ribs.

I was also shown by Dr. Cuypers some of his churches and houses at Amsterdam, where brick and iron are successfully combined.

G. AITCHISON.

Mr. W. J. Anderson's Lectures at Glasgow.

A remarkable series of lectures by Mr. William J. Anderson [A.] has been arranged by the Glasgow School of Art for the coming session. The course, consisting of twenty-four lectures, is entitled "The Historic Development of Architecture," the separate lectures being headed as follows:—

1. Egyptian, Babylonian, and Assyrian Architecture.
2. Mycenaean Age in Greece.
3. Archaic Greece.
4. Culmination and Coalescence of Hellenic Art in Attica.
5. Culmination in Attica and Ionia.
6. Declining Greece and Romano-Greek Revival.
7. Etruscan Rome and the Augustan Age.
8. Culminating Period of Trajan and Hadrian.
9. Decline and Fall of Roman Imperial Architecture.
10. The Early Christian Era.
11. Byzantine and Romanesque Architecture.
12. Gothic Architecture in the Making.
13. The Early English Style.
14. The Middle English Style.
15. The Completed English Style.
16. The Florentine Reversion to Latinism.
17. The Early Renaissance beyond Florence.
18. The Culmination in Rome.
19. Three Architects of the Roman Renaissance.
20. Michelangelo, Palladio, and Decline.
21. The Renaissance in France.
22. The Renaissance in England.
23. Scottish Domestic Architecture.
24. The Nineteenth Century in Western Europe.

A note to the "syllabus raisonné" issued by the Glasgow School of Art contains the following remarks: "The historical method has been adopted in these lectures, not merely because such a course gives a consecutive view of the rise and fall of architecture in relation to civilisation, but also because the historical treatment affords the largest opportunity for the study of the best examples; for an analysis of the principles of design; for an insight into the controlling forces behind the artist; for an insistence upon the influence of fresh purpose, and for noting the effect of the changes wrought by the use of new materials and processes."

The late George Kenyon [A.].

The death is announced of Mr. George Kenyon on the 22nd ult., at the early age of thirty-five. He had been a member of the Institute since 1889. His decease at the outset of a career of much promise is greatly to be regretted. He entered the office of Mr. Edward Hughes of Huddersfield at the age of nineteen, but before his articles had expired he found he had learned as much as he could in the office, and went to the École des Beaux-Arts in Paris, where he studied under Pascal for three or four years. Coming back to London, he worked under Mr. W. D.

Caröe [F.], and a few years afterwards went into independent practice. His chief work was the Hope Hospital at Langhope, which he designed in association with Messrs. Woodd and Ainslie. His connection with the Royal Institute was an honourable one. He was Tite Prizeman in 1888, and served for a time as Hon. Secretary of the Art Committee.

Additions to the Library.

The ninth edition of Murray's *Handbook for Egypt* [London: John Murray] has been received from the publisher. The greater facilities of communication which have revolutionised travelling in Egypt, and the vastly increased knowledge which we possess, in the light of recent research, of the history, religion, and architecture of its ancient inhabitants, have necessitated the practical rewriting of this edition, which has also been supplemented by a number of new maps and plans, carefully executed from the most recent surveys. Miss Mary Brodrick, Ph.D., aided by Prof. Sayce and Captain Lyons, is responsible for the editing of this scholarly and practical guide.

Count Goblet d'Alviella, President of the Royal Academy at Brussels, has presented a pamphlet entitled *Des Influences Classiques dans l'Art de l'Inde*, a Paper originally contributed by him to the *Bulletins* of the Academy.

Mr. J. Stübgen [Hon. Corr. M.] has sent a copy of the *Deutsche Bauzeitung* for July, containing a short article, illustrated, from his pen entitled *Der Umbau der innern Stadt Agram*.

Mr. W. Griggs, the publisher, has forwarded the last quarterly part of *The Journal of Indian Art* (vol. vii. No. 59), containing an article by Mr. N. N. Banerji on "Dyes and Dyeing in Bengal," with examples of stamped patterns. Mr. Edgar Thurston contributes to the same number an article on "The Cotton Fabric Industry of the Madras Presidency," and gives some reproductions of Arcot wood blocks.—Mr. Marcus T. Reynolds contributes the second part of his article on "The Villas of Rome" to the September number of *The Architectural Record*; and Mr. Jean Schopfer writes on Swiss Chalets, and Mr. Barr Ferree on the Cathedrals of Provence in continuation of his series of articles on French Cathedrals.—Mr. George Hirth, the publisher, has presented, through Messrs. Williams & Norgate, parts v. and vi. of *Der Formen Schatz*.

NOTES, QUERIES, AND REPLIES.

The Sculpture of the West Front of Wells Cathedral.

From S. J. NICHOLL [A.]—

Some little time back I formed the idea that the inspiring source of the west front of Wells Cathedral might have been the Greek screen, the triumphal image-bearing entrance to the sanctuary, and I ask leave to submit my parallel.

The Iconostasis is described in a Paper by Herr Hallman in the *Institute Transactions*,* as a colossal screen occupying the whole width of the church. It is divided into a series of horizontal bands, the lowest having the three entrances, the central door adorned with a representation of the Annunciation. The upper tiers are composed of figures painted on tablets or in niches representing the Blessed Trinity, our Lord enthroned, the Madonna, patriarchs, prophets, saints, and angels; the central figures, including the crowning one, being seated, and filling up the panels to the full height, are larger than the others; the complete screen, having a tier generally only half the height of the others, containing subject groups of figures.

Now in the façade of Wells we have the marked division of the whole front, which forms a screen to the body of the church, into horizontal bands, the lower one with its three doorways, the central doorway adorned, not by the joyful mystery of the Annunciation, but by the glorious one of the Coronation. Above are tiers of niches with single figures, and a band of smaller size than the others containing subject groups of figures; the whole crowned by a central figure, of large size, of our Lord in judgment and triumph. The smaller band of sculpture represents the resurrection of the dead.

The whole thus may be said to be a typical reproduction of the Iconostasis, as also a poem of the resurrection and glorification of the just, commencing with the Coronation of the Blessed Virgin, whose body was by a singular privilege assumed to glory before the general resurrection.

I should be grateful for any remarks on this subject from those who have had special opportunities of studying the sculpture in detail.

REVIEWS. LIX.

(163)

MONT BEUVRAY AND AUTUN.

The Mount: Narrative of a Visit to the Site of a Gaulish City on Mont Beuvray; with a Description of the Neighbouring City of Autun. By P. G. Hamerton. 80. Lond. 1897. Price 3s. 6d. nett. [Seeley & Co., 38, Great Russell Street.]

This book, as the preface says, is an unpublished portion of "Round my House," and it is written in the same pleasant, unaffected style as its predecessor. Mr. Hamerton was a man with all an artist's instincts, and to hear him chat about architecture—as he does a good deal in this book—is very interesting, and may be instructive. It is well for us architects to have our problems discussed occasionally by outsiders who have had an artist's training. We then see things from the point of view of men who, though not reared by the mother of all the arts, still possess a keen eye for the eternal fitness of things; and this posses-

sion, together with a knowledge of where to draw the line, goes a long way towards furnishing an artist's equipment.

The old question of what makes a building look beautiful is discussed by the author and his friend the antiquary, and they set themselves to consider "how it was that rude, unlettered peasants, centuries ago, could design an interesting building, when the clever, educated architects in modern towns only design things that make an artist shut his eyes or look in another direction." The conclusions they come to must be gathered from the book itself; but it may be forgiven to architects in modern towns if they do not readily agree with the latter of the premisses from which the argument starts. The vexed question of restoration is also discussed, and the reader as he turns the pages, no matter to what school he belongs, will now bless and now curse his author, who in one paragraph shines with the radiance of the Chosen People, and in the next with the brazen gleam of the Philistine.

The Mount is the site of a Gaulish city, a description of which naturally involves a certain amount of antiquarian detail; but this is not unduly obtruded, and there are so many excursions into the neighbouring country that the architect in search of a sketching-ground can gain a fund of suggestions. We read of Romanesque churches, of which Mr. Hamerton was (perhaps unreasonably) fond; and of Renaissance châteaux, one having a "pigeon-tower with its dome and crown of columns," another having formal gardens, and yet another with a cut horn-beam hedge twenty feet high and a thousand yards long. Mr. Hamerton confesses "to an old-fashioned liking for formality in gardens," and puts the case for them with much simplicity and force. As he wrote in the early seventies, he was a kind of prophet, a voice crying in the wilderness for paths to be made straight.

A passage of singular interest is a description of how he and his antiquarian friends, having found a Gaulish hearth with the ancient embers still left on it, lighted a fire thereon and set aglow the ashes that had been dead for two thousand years. He remarks how profoundly this incident stirred their imaginations, and imparted to himself an altogether unexpected faculty for translating Rossetti's poems into French verse *extempore*. We must all have noticed—though not to so singular a degree—how simple things will stir the imagination: a strain of music, the colour and disposition of a few clouds at sunset, or a wide view from a commanding hill. Mr. Hamerton's own description of a visit to a deserted château by night has much to stimulate the mind, though not to the extent of enabling one to translate Rossetti into a foreign tongue.

The second part of the book is devoted to the city of Autun, a place full of interest to an architect, however wide or narrow his sympathies; for

* "History of Greco-Russian Ecclesiastical Architecture," *TRANSACTIONS R.I.B.A.*, Vol. I. (1842), p. 95.

there are in it remains of all periods and styles, from the time of the Romans down to those of us "architects in modern towns." There is nothing dogmatic in what Mr. Hamerton says; it is all simple, genial, and suggestive; and one lays down his book with a desire to go and see the places he talks about. No greater compliment can be paid to a book of this kind than that.

Kettering.

J. ALFRED GOTCH.

(164)

A POCKET PRICE-BOOK.

A Price-Book for Approximate Estimates. By T. C. Coleman, F.S.I. 32mo. Lond. 1897. [E. & F. N. Spon, Limited, 125, Strand.]

Mr. T. E. Coleman, F.S.I., has compiled a handy little book, which, with the exercise of care, will be found very useful to architects, engineers, and builders. The object of the book, as stated in the preface, is to "afford assistance to those who from time to time must be prepared to determine (often at a moment's notice) the approximate cost of various buildings and works which are in the preliminary stage of consideration, or for which only general schemes and designs have been prepared."

Viewed in this light the very numerous items conveniently and alphabetically arranged by Mr. Coleman would be of considerable service to all engaged in making approximate estimates; but probably we have all at some period of our lives found how mistaken we have been in quoting to our clients the probable cost of buildings, based upon estimates obtained by the familiar "foot cube" or "square" process. Too much caution cannot be adopted in forming estimates, which are to be of any value, upon the fallacious "foot cube" principle; and if ever the expression "circumstances alter cases" becomes of value, it certainly does in this "cubing" method. With that reservation, however, Mr. Coleman's book will, as I have said, be found to be of much service, and where I have been able to compare his figures with my own experience the divergence has not been great. For London, however, with labour as it is, his prices are, in some instances, rather low.

WM. WOODWARD.

LEGAL.

THE LONDON BUILDING ACT, s. 74.

Division of Buildings used partly for Trade and partly as Dwellings.

A case of some interest under section 74 of the London Building Act was recently decided by Mr. Hannay at the Marlborough Street Police Court, in connection with the rebuilding of the "Rising Sun" tavern, situate at the corner of Windmill Street and Tottenham Court Road. The whole of the ground storey was arranged as a bar, entered from both streets, and the first storey, all except the staircases, constituted a large billiard-room. The plans showed a single staircase, approached from the bar, leading to the first storey; and the landing was separated from the billiard-room by an enclosure which was proposed to be of brickwork $4\frac{1}{2}$ inches thick, with a door to the

billiard-room having glass panels. From this landing, but separated both from the billiard-room and from the staircase last mentioned by a 9-inch wall, a staircase led to the upper storeys, which were to be used as sleeping rooms for the staff, &c.

The District Surveyor served notice of objection on the builders, and the owner appealed in their name from such notice to the magistrate.

Mr. H. Parker Lowe appeared for the appellant, and Mr. T. Seager Berry, instructed by the London County Council, represented the District Surveyor.

The notice of objection of the District Surveyor was to the effect that the building would exceed ten squares in area, and would be used partly for trade and partly as a dwelling, and that these two parts were not separated, in accordance with section 74, by walls and floors of fire-resisting materials, inasmuch as there would be a common staircase belonging to both parts of the building entered from the bar, and without any separation from either part; and also that the enclosure on the first storey, being only $4\frac{1}{2}$ inches thick, and having a door with glass panels, was not a proper wall of fire-resisting materials between the staircase and landing, leading to the dwelling on the one hand, and the billiard-room on the other.

For the appellant it was contended that the enclosure of the staircase up to the one-pair storey and of the landing on that storey, so as to separate the ground-floor stairs from the billiard-room, was not prescribed by section 74; but that it was sufficient to have a staircase starting from the billiard-room upwards, enclosed with a brick wall and a fire-resisting door.

In support of the District Surveyor's notice of objection, it was argued that such a construction as the builder proposed did not satisfy the section, which in effect required the approach to the dwelling-house portion to be entirely separated from the trade portion; that the section, though clumsily worded, effected this object by saying that "all means of approach to the dwelling-house portion should be constructed throughout of fire-resisting material"; that in this case the dwelling-house portion could not be approached except by coming through the bar, either from one street or the other, to the staircase, and that the bar itself was therefore a means of approach to the dwelling-house portion, and that inasmuch as the bar would presumably have glass windows and doors, &c., in it, it could not be constructed throughout of fire-resisting materials, and so must not be used as an approach to the dwelling-house portion. To comply with the section it was necessary, as the District Surveyor required, to make a separate approach entirely walled off from the bar by a 9-inch wall leading from one of the streets to the staircase, and also to separate the billiard-room from the staircase by a similar wall, since in no other way could the builder provide the dwelling-house with an approach which would be fire-resisting throughout. It was pointed out that such an approach could be readily made from Windmill Street.

Mr. Hannay said that the construction proposed by the builder would produce the very evil that the clause appeared intended to prevent, viz., that in case of fire in the trade part of the building, persons in the dwelling-house part would have to rush through the flames to get out of the building. In this case the bar was being used as an approach to the living-rooms, and the bar could not be made fire-resisting throughout. He accordingly upheld the requirements of the District Surveyor.

In this case Messrs. Treadwell & Martin, the architects of the building, arranged that the objectionable practice of "summoning the District Surveyor" was not taken, but the more proper mode of obtaining an appointment for the magistrate to hear the case, and giving the District Surveyor notice of it, was adopted. In a matter like the present, arising on notice of objection under section 150, nothing in the section warrants any summons being issued to either party.

